
凤仙花属  feng xian hua shu

Balsamina Miller.

Morphological characters are the same as those of the family, except: lateral petals always united in pairs into lateral, united petals; fruit a fleshy, explosive capsule; seeds often dispersed elastically from valves when ripe.

More than 900 species: tropical and subtropical mountains of the E hemisphere, some species in temperate Asia, Europe, and North America; 227 species (187 endemic, two introduced) in China; three additional species (all endemic) of uncertain placement.

Impatiens balsamina (species no. 2) is widely cultivated as an ornamental and medicinal plant. Recently, I. walleriana J. D. Hooker (species no. 4) has become commonly cultivated, and I. usambarensis Grey-Wilson, native to Tanzania, has been introduced.

Taxonomically, Impatiens is a very difficult group. The stem is usually fleshy and succulent, making collected specimens difficult to dry and conserve. The texture of the sepals and petals is very delicate, extremely thin and hyaline. In dried specimens, all of the flower parts are often plicate and coalesced. Although it is difficult to separate and reconstruct the flower parts, determining the shapes and sizes of the sepals and petals, and apices of the anthers (i.e., obtuse or acute), is necessary for identification. To identify and describe every species exactly, we removed flowers from specimens, immersed them in water, and dissected them under a microscope to observe their flower and anther characters clearly. This process is not only time-consuming but also uncertain of success.


1a. Capsule short, ellipsoid, middle turgid, both ends contracted and rostrate; seeds rounded.
2a. Inflorescences sessile; flowers solitary or 2- or 3-fascicled in leaf axils.
   3a. Leaves opposite, sessile or subsessile, linear or linear-lanceolate, base rounded or subcordate, margin remotely serrate; capsule glabrous ........................................................... 1. I. chinensis
   3b. Leaves alternate, petiolate, lanceolate to ovate, base cuneate, margin sharply serrate to crenate or nearly entire; capsule tomentose or densely pubescent.
      4a. Leaf blade lanceolate or narrowly elliptic, base with few pairs of black glands, margin sharply serrate, glabrous or pubescent; capsules and flowers densely pubescent (cultivated) .............................................. 2. I. balsamina
      4b. Leaf blade ovate or ovate-lanceolate, basal margin often long ciliate, inconspicuously crenate or nearly entire; petioles, both surfaces of leaves, and flowers with multicellular hairs; capsule tomentose .................. 3. I. aureliana

2b. Inflorescences pedunculate, 2- or 3-5-flowered, subumbellate or racemose, rarely solitary flowers.
   5a. Leaves alternate, broadly elliptic or ovate, glabrous; flowers 2, rarely 3-5, red, crimson-red, pink, purple-red, purplish violet, or white; bracts linear-lanceolate or subulate (cultivated) .............................................................. 4. I. walleriana
   5b. Leaves opposite, alternate, or subverticillate, ovate, ovate-lanceolate, or elliptic-lanceolate, hairy or only veins sparsely pilose; flowers 1 or 2, or 4-8 in subumbels or dense racemes, purple, pink-purple, or golden-yellow; bracts linear or ovate-lanceolate.
      6a. Leaves opposite or alternate, ovate or ovate-lanceolate, adaxially appressed pilose, abaxially pubescent on veins; flowers 4-8 in subumbels or dense racemes, pink-purple, small; bracts linear, ciliate ....................... 5. I. bracteata
      6b. Leaves alternate or subverticillate in upper part, lanceolate or elliptic-lanceolate, adaxially veins slightly scabrid, abaxially glabrous; flowers 1 or 2, golden-yellow, throat purple spotted, 2-2.5 cm; bracts ovate-lanceolate, setose ........................................................................ 6. I. xanthina

1b. Capsule elongate, fusiform, clavate, or linear-cylindric; seeds oblong or obovate.
   7a. Distal lobes of lateral united petals connate or coadnate into lamella or at least auricle connate; capsule fusiform or clavate.
      8a. Lateral sepals 2; flowers yellowish, white, or pink, spotted.
         9a. Inflorescences not pedunculate, 1-flowered; pedicel without bracts; flowers white or pink, orange spotted ...... 10. I. morsei
         9b. Inflorescences shortly pedunculate, 1-flowered, rarely 2-flowered; pedicel with small bracts at base; flowers yellowish, purple spotted ......................................................................................... 11. I. hainanensis
      8b. Lateral sepals 4; flowers pink-purple.
         10a. Inflorescences not pedunculate, 1-flowered; pedicel without bracts; leaf margin crenate-serrate ............ 9. I. musyana
7b. Distal lobes of lateral united petals free; capsule clavate or linear-cylindric.

12a. Basal and distal lobes of lateral united petals apically acuminate, apex elongated into a filamentous hair or at least basal lobes apically with a long, filamentous hair (except *I. gongshanensis*).

13a. Lateral sepals coarsely denticulate, irregularly lacerate, or acutely 4- or 5-denticulate on one side.

13a. Lateral sepals coarsely denticulate or at least 4- or 5-denticulate.

15a. Lateral sepals often coarsely dentate; lateral united petals not clawed, basal and distal lobes lanceolate, apically with a long, filamentous hair; lower sepals with a 2-lobed, incurved, short spur ......................... 209. *I. dicentra*

15b. Lateral sepals inequilateral, 4- or 5-denticulate on one side, purple spotted; lateral united petals clawed, basal lobes oblong, apically with a filamentous hair 6–7 mm, distal lobes without a filamentous hair; lower sepals with 2 or 3, 2-lobed, short spurs ................................................................. 210. *I. paradoxa*

14b. Lateral sepals inconspicuously denticulate or irregularly lacerate.

16a. Inflorescences 1-flowered; bracts narrowly lanceolate; flowers orange-yellow or yellow; lateral sepals subovate-orbicular, inconspicuously denticulate; lower sepals with a hooked, 2-lobed spur; capsule ellipsoid ........................................................................................................................................... 211. *I. fissions*

16b. Inflorescences 1–4-flowered; bracts oblong-ovate or narrowly ovate; flowers yellow or pale purple; lateral sepals orbicular or broadly ovate, irregularly lacerate, and sometimes irregularly fimbriate; lower sepals with an incurved, broad or 2-lobed spur; capsule linear.

17a. Flowers yellow, to 4.5 cm; lateral sepals orbicular or broadly ovate-orbicular, margin and abaxial midvein irregularly fimbriate, lacerate; lower sepal narrowed into a hooked, incurved, 2-lobed spur 5–6 mm .................................................................................................................. 212. *I. lacinulifera*

17b. Flowers pale purple, 2–3 cm; lateral sepals broadly ovate or suborbicular, margin irregularly lacerate; leaves basally with a few teeth and glandular hairs; lower sepal saccate, with an incurved, broad spur ............................................................................................................................................. 213. *I. platyceras*

18a. Basal and distal lobes of lateral united petals acutely acuminate, apex elongated into a filamentous hair.

19a. Peduncles very short, inflorescences 1–3-flowered; flowers smaller, white; lateral sepals broadly ovate-cordate, ca. 1 cm in diam., abaxial midvein cristate; lateral united petals broadly clawed; lower sepal broadly funneliform or subsaccate, with a 2-lobed, long spur .............................................................. 214. *I. toxophora*

19b. Peduncles longer, 1–3 cm, inflorescences 1- or 2-flowered, rarely 3-flowered; flowers 3–4 cm, yellow or bicolored; lateral sepals orbicular, 1–1.5 cm in diam., abaxial midvein not cristate; lower sepal saccate, with a 2-lobed, incurved, short spur.

20a. Lateral sepals purple-red or purple spotted, many veined; upper petal with abaxial midvein broadly cristate, purple or yellow; lower sepal deeply saccate, with a 2-lobed, incurved, short spur; inflorescences terminal .................................................. 215. *I. platychaena*

20b. Lateral sepals green or yellow-green, abaxial midvein basally with a small sac or turgid; lower sepal saccate or saccate-funneliform, with a 2-denticulate or -lobed, incurved or not, stout spur; inflorescences axillary.

21a. Inflorescences 1-flowered, peduncle 0.9–1.1 cm; upper petal orbicular, abaxial midvein large, rounded cristate; lateral united petals broadly shortly clawed, basal lobes purple spotted; lower sepal purple striate, with a 2-lobed, incurved, stout spur; leaf blade with 5 or 6 pairs of lateral veins ........ 216. *I. vittata*

21b. Inflorescences 1- or 2-flowered, peduncle 2–3 cm; upper petal subreniform, abaxial midvein narrowly cristate, apex hooked-cuspidate, lateral united petals not clawed, basal lobes not spotted; lower sepal not purple striate, with a 2-denticulate, short, stout spur; leaf blade with 8–10 pairs of lateral veins ................................................................. 217. *I. robusta*

18b. Basal lobes of lateral united petals acutely acuminate, apex elongated into a filamentous hair only, distal lobes acutely acuminate, capsule clavate or linear-cylindric.

22a. Flowers pink; lateral sepals papery, orbicular, 10–15 mm in diam., glabrous, abaxial midvein carinate; distal lobes of lateral united petals broad, apically with a long seta; leaves alternate, ovate or ovate-lanceolate, or oblong-ovate, or upper ones rounded or cordate ........................................ 225. *I. lecomtei*
24b. Flowers blue-purple; lateral sepals obliquely ovate, 5–6 mm wide, adpressed puberulent, 5–7-veined; distal lobes apically without a seta; leaves crowded at apex of stem, narrowly lanceolate ................................................................. 227. *I. gongshanensis*

22b. Flowers yellow or white; lower sepal funnelform or saccate.

25a. Leaves rigid, base rounded, without glands; lateral sepals broadly ovate, apex acuminate, abaxial midvein narrowly cristate; distal lobes of lateral united petals apically rounded, apically with or without a seta ................................................................. 218. *I. soulieana*

25b. Leaves membranous, base acute, rounded, or subcordate, with stipitate glands or filamentous glands; lateral sepals with abaxial midvein cristate or carinate, or not thickened; distal lobes of lateral united petals apically obtuse, without a seta.

26a. Lateral sepals with abaxial midvein not thickened, 7–9-veined; inflorescences 1-flowered, above middle 2-bracteate.

27a. Peduncles ca. 1 cm; bracts ovate-lanceolate, ca. 3 mm; flowers yellowish; upper petal with abaxial midvein green cristate; lower sepal saccate, with a hooked spur ca. 8 mm ......................... 223. *I. davidii*

27b. Peduncles 1.5–4.5 cm; bracts linear or ovate; flowers yellow, pink or reddish spotted; upper petal with abaxial midvein camel-backed, cristate; lower sepal broadly funnelform, with a 2-lobed, incurved spur ca. 25 mm ................................................................. 224. *I. tayemonii*

26b. Lateral sepals with abaxial midvein thickened, cristate or carinate; inflorescences 1- or 2-flowered, at middle bracteate.

28a. Peduncles 3–4 cm, inflorescences 2-flowered; flowers ca. 4 cm .................. 222. *I. waldeimiana*

28b. Peduncles 0.5–1.5 cm, inflorescences 1- or 2-flowered; flowers smaller.

29a. Flowers pale yellow; lower sepal shortly saccate, with spur 4–5 mm; leaf blade with 7–9 pairs of lateral veins .................................................................................................................. 221. *I. conaensis*

29b. Peduncles very short, inflorescences 1-flowered; flowers ca. 3 cm in diam.; bracts subulate; lateral sepals 12–20 mm wide, 7-veined, abaxial midvein acutely carinate; leaf blade 6–10 cm, apically acuminate or caudate ................................................................. 219. *I. brevipes*

30a. Peduncles 5–10 mm, inflorescences 1- or 2-flowered; flowers 1.5–2 cm in diam.; bracts ovate, apex aristate; lateral sepals ca. 8 mm wide, abaxial midvein narrowly cristate; leaf blade 2–5 cm, apically acute .................................................................................. 220. *I. mussotii*

12b. Basal lobes of lateral united petals apically not acuminate, not elongated into a long filamentous hair.

31a. Lowest pedicels of inflorescence without bract at base.

32a. Lower sepal navicular, without spur outside.

33a. Middle and upper leaves sessile, base cordate, amplexicaul, margin nearly entire or shallowly undulate; flowers white, very small; distal lobes of lateral united petals oblong-lanceolate .............. 207. *I. nubigena*

33b. All leaves shortly petiolate, base truncate or cuneate, margin remotely coarsely crenate; flowers yellow, medium-sized; lower sepal purple brown; distal lobes of lateral united petals linear, apically elongate 1.7–1.8 cm ........................................................................................................ 208. *I. tenerrima*

32b. Lower sepal cornute, narrowly funnelform, saccate, or dilated and incurved, with spur outside.

34a. Lateral sepals 4.

35a. Lower sepal cornute or narrowly funnelform.

36a. Peduncles 4–6 cm, inflorescences 4-6-flowered, racemose; bracts membranous, broadly ovate, green or pink-purple, caducous; flowers yellow, tinged purple; lower sepal cornute, with a clavate, curved slender spur 4–5 mm; leaf blade to 8.5 × 3.5 cm, lateral veins 6–8 pairs; plants to 50 cm tall ................................................................. 168. *I. cornucopia*

36b. Peduncles 1–1.5 cm, inflorescences 1- or 2-flowered; bracts leaflike, lanceolate, persistent; flowers golden-yellow; lower sepal narrowly funnelform, with a curved or involute spur 15–20 mm; leaf blade to 3 × 1.5 cm, lateral veins 2–6 pairs; plants to 16 cm tall.

37a. Peduncles glabrous; outer 2 sepals orbicular, inner 2 ovate; lower sepal purple spotted; leaves glabrous ........................................................................................................ 169. *I. xanthocephala*

37b. Peduncles yellow-brown pubescent; outer 2 sepals ovate-lanceolate, inner 2 very small, linear; lower sepal and upper petal puberulent, not spotted; leaves pilose on veins .......... 170. *I. hengduanensis*

35b. Lower sepal saccate or dilated and incurved.

38a. Lower sepal dilated and incurved, base abruptly contracted into an erect spur ............... 167. *I. gasterocheila*

38b. Lower sepal saccate, abruptly narrowed into a short or very short, 2-lobed, curved spur.

39a. Stem and both surfaces of leaves pubescent; lateral sepals, upper petal, and lower sepal villous or barbate .................................................................................. 160. *I. barbata*

39b. Stem, leaves, lateral sepals, upper petal, and lower sepal glabrous.
40a. Stem, branches, and peduncles purple or red-brown spotted; outer 2 sepals linear-lanceolate ................................................................. 161. I. stenosepala
40b. Stem, branches, and peduncles not spotted; outer 2 sepals not linear-lanceolate.
41a. Inflorescences 2–4-flowered; flowers pink or pale purple.
41b. Inflorescences 1–2-flowered; flowers yellow or orange.
42a. Flowers pale purple; outer sepals with abaxial midvein carinate, inner sepals subulate; leaves basally rounded or cordate, margin sharply serrate ...................................................... 162. I. lushiensis
42b. Flowers pink; outer sepals 5–7-veined, inner sepals narrowly oblong; leaves basally broadly cuneate, margin crenate-serrate ................................................................. 163. I. anhuiensis
43a. Leaves rigidly papery, narrowly oblong or narrowly lanceolate, margin sharply serrate, lateral sepals subulate; flowers not spotted ............................................................. 166. I. chiulungensis
43b. Leaves membranous or thinly membranous, ovate to ovate-lanceolate or ovate-oblong, margin crenate, lateral veins 9–11 pairs; flowers purple spotted.
44a. All leaves homomorphic, ovate or ovate-lanceolate, shortly petiolate, caduate; upper petal with abaxial midvein conspicuously crenate, distal lobes of lateral united petals entire ........................................................................................................ 164. I. corchorifolia
44b. Leaves heteromorphic, upper leaves ovate-lanceolate, subsessile, lower leaves ovate or ovate-oblong, long petiolate; upper petal midvein fine, carinate, distal lobes of lateral united petals denticulate ......................................................................................... 165. I. dimorphophylla
34b. Lateral sepals 2.
45a. Anthers acute.
45b. Anthers obtuse.
46a. Flowers purple-red or pale purple.
46b. Flowers yellow or yellowish.
47a. Bracts linear-subulate, ca. 2 mm, flowers dark purple; upper petal orbicular, abaxial midvein with elephant-trunk-shaped long rostrum; lower sepals broadly funnelform .................................... 177. I. nasuta
47b. Bracts lanceolate, 3–4 mm, flowers pale violet; upper petal subreniform, abaxial midvein with recurved long rostrum near apex; lower sepals saccate ................................................................. 178. I. compa
48a. Bracts orbicular or broadly ovate, margin denticate.
48b. Bracts ovate, lanceolate, or subulate, margin crenate or entire.
49a. Leaves rigid, oblong or ovate-oblong, lateral veins 6 or 7 pairs; bracts orbicular, 3–4 mm in diam., persistent; lateral sepals membranous, broadly ovate, 4–8-veined .......... 175. I. latebracteata
49b. Leaves membranous, ovate or elliptic, lateral veins 3–5 pairs; bracts broadly ovate, 4–5 mm, caducous; lateral sepals obliquely ovate ................................................................. 176. I. oligoneura
50a. Leaf margin shallowly crenate or nearly entire ............................................................. 174. I. odontopetala
50b. Leaf margin crenate.
51a. Leaves ovate or ovate-elliptic, base cuneate or rounded, adaxially dark green, abaxially green; bracts lanceolate; lateral sepals ovate, 5–6 mm ........................................... 171. I. noli-tangere
51b. Leaves elliptic or ovate-oblong, base rounded or cordate, adaxially green, abaxially pale green or gray-green; bracts ovate, very small; lateral sepals orbicular or broadly ovate, 6–8 mm.
52a. Bracts 2–3 mm; lateral sepals subcordate, green veined, mucronulate; lateral united petals long clawed, distal lobes narrowly elliptic; flowers yellowish; lower sepals purple spotted ................................................................. 172. I. longialata
52b. Bracts very small or basal pedicels without bracts; lateral sepals orbicular, reticulate veined; lateral united petals not clawed, distal lobes dolabelliform; flowers yellow-white ......................................................... 173. I. sutchuenensis
45b. Anthers obtuse.
53a. Leaf margin coarsely crenate or undulate.
53b. Leaf margin crenate.
54a. Lower and median leaves long petiolate, upper leaves sessile or subsessile, base cordate-amplexicaul, margin coarsely crenate; lower sepal cup-shaped, subglobose, or saccate.
54b. All leaves petiolate, base cuneate, margin crenate-dentate; flowers yellow; lower sepal
55a. Flowers yellow or pink-white; lower sepal subglobose or cup-shaped, violet or purplish yellow striate; leaf blade to 5 cm wide; plants to 90 cm tall ...................................................... 179. I. poculifer
55b. Flowers pale purple, purple-red, or dirty yellow; lower sepal saccate; leaf blade to 3 cm wide; plants 30–60 cm tall.
56a. Flowers pale purple or dirty yellow; lower sepals with an incurved, short spur ................................ 180. I. delavayi
56b. Flowers purple-red; lower sepal without spur or with an erect spur shorter than 2 mm ........................................................................................................... 181. I. subecalcarata
57a. Lower and median leaves to 30 cm long; plants 90 cm tall; flowers white; lower sepal subglobose; leaf blade to 8 cm wide; flowers white or yellowish ........................................................................ 182. I. stenosepala
57b. Lower and median leaves to 15 cm long; plants 60 cm tall; flowers green; lower sepal subglobose; leaf blade to 3 cm wide; flowers yellow ...................................................................... 183. I. nasuta
navicular or salver-shaped.

57a. Bracts linear or subulate; lateral sepals ovate or suborbicular, abaxial midvein without a process; lateral united petals sessile or subsessile, distal lobes of lateral united petals abaxially lobed or incised.

58a. Leaf blade broadly ovate or orbicular, base cuneate, margin coarsely crenate; bracts linear; upper petal with abaxial midvein angular; lower sepal navicular, with an incurved spur ca. 1.5 cm ................................................................. 182. I. notolopha

58b. Leaf blade ovate or ovate-orbicular, base truncate or cordate, margin undulate; bracts ovate; lateral united petals linear, abaxial midvein carinate; basal lobes of lateral united petals ovate; flowers white; leaf blade 5–12 cm. ........................................................................................................ 183. I. undulata

57b. Bracts ovate or ovate-lanceolate; lateral sepals ovate or linear, abaxial midvein carinate;
distal lobes of lateral united petals entire.

59a. Bracts ovate; lateral sepals ovate, hyaline margined, abaxial midvein narrowly winged;
basal lobes of lateral united petals falcate, recurved; flowers yellowish, upper petal purple-red spotted; plants to 60 cm tall .................................................................................. 184. I. maliensis

59b. Bracts ovate-lanceolate; lateral sepals linear, abaxial midvein carinate; basal lobes of lateral united petals ovate; flowers white; leaf blade 5–12 cm. ........................................................................................................ 185. I. apsotis

53b. Leaf margin serrate, rarely crenate-serrate.

60a. Plant usually hairy.

61a. Plants yellow-brown spreading tomentose; flowers yellow or white; margin of lateral sepals entire; leaf blade 3–8 cm ................................................................. 186. I. lasiophyton

61b. Stem, branches, and young leaves yellow-brown tomentulose or at least upper part and nodes yellow-brown pubescent; flowers orange or purple-red; margin of lateral sepals denticulate; leaf blade 5–12 cm.

62a. Stem, branches, and peduncles densely yellow-brown tomentose; flowers orange; lateral sepals ovate; leaf margin serrate ................................................................. 187. I. tomentella

62b. Upper stem and nodes often sparsely yellow-brown pubescent; flowers purple-red; lateral sepals subovate, inequilateral, margin denticulate on one side; leaf margin serrulate ................................................................. 188. I. leptocaulon

60b. Plant glabrous.

63a. Margin of lateral sepals ± denticulate.

64a. Leaf margin serrulate, blade 3–5 cm; flowers yellow ................................................. 192. I. minimisepala

64b. Leaf margin crenate or coarsely crenate, blade 4–12 cm; flowers pink, purple, or purple-red.

65a. Flowers pink, ca. 1.5 cm; lateral sepals ovate-orbicular, 3–4 mm, margin denticulate on one side; leaf blade with 4–6 pairs of lateral veins ................................................................. 191. I. torulosa

65b. Flowers purple or purple-red, 3.5–4.5 cm; lateral sepals 3–6 mm wide, margin ciliate or denticulate; leaf blade with 7–12 pairs of lateral veins.

66a. Bracts linear, 3–4 mm, caducous; lateral sepals ovate or orbicular, 3–4 mm wide, margin ciliate or remotely denticulate; upper petal subreniform, abaxial midvein narrowly thickened; lower sepal with spur to 3.5 cm. .................................................................................. 189. I. blepharosepala

66b. Bracts lanceolate, 5–7 mm, persistent; lateral sepals broadly ovate, 5–6 mm wide, margin long cuspidate, denticulate; upper petal oblate, ca. 3.5 cm wide, abaxial midvein narrowly carinate; lower sepal with spur 2–2.5 cm ........................................... 190. I. macrovexilla

63b. Margin of lateral sepals entire.

67a. Inflorescences 3–7– or 6–8-flowered; flowers in racemes.

68a. Inflorescences 3–7– or 6–8-flowered; bracts subulate, 2–3 mm; flowers yellow, ca. 4 cm; lateral sepals reniform-orbicular, apex cuspidate .......................... 203. I. tortisepala

68b. Inflorescences 3–7– or 6–8-flowered; bracts ovate-lanceolate or broadly ovate; flowers pale purple or white, 3–3.5 cm; lateral sepals not reniform.

69a. Bracts linear, 3–4 mm, caducous; lateral sepals ovate or orbicular, 2–3 mm, persistent; lateral sepals ovate, ca. 4 mm, 3–5-veined; lower sepal funnelform, with a 2-lobed, curved spur 1–4 cm; leaf blade to 12 cm ................................................................. 204. I. tienmushanica

69b. Bracts linear, 3–4 mm, caducous; lateral sepals elliptic or ovate, 5–5.5 mm; lower sepal saccate or funnelform, with an erect or incurved spur 1.5–2.2 cm; leaf blade 14–15 cm.

70a. Peduncles stout, inflorescences 4–6-flowered; flowers white; lateral sepals ovate, ca. 5 mm; upper petal suborbicular, abaxial midvein narrowly carinate; lower
sepal funnelform, with an erect spur 1.5–1.8 cm; leaf blade with 7–9 pairs of lateral veins ........................................................................................................... 205. *I. jiulongshanica*

70b. Peduncles slender, inflorescences 3–6-flowered; flowers yellow; lateral sepals elliptic, ca. 5.5 mm; upper petal obovate, abaxial midvein incarinate; lower sepal saccate, with an erect or incurved spur ca. 2.2 cm; leaf blade with 5 or 6 pairs of lateral veins ........................................................................................................... 206. *I. devolii*

67b. Inflorescences 2- or 3-flowered, rarely 1- or 4-flowered, arranged divaricately or subumbellately.

71a. Peduncles shorter than 1 cm, stout, inflorescences 2- or 3-flowered, not divaricate.  
72a. Flowers pink, pedicel 15–25 mm; lateral sepals 1–1.5 cm; lower sepal broadly funnelform, with an involute, long spur 3–4 cm ......................................................... 201. *I. platysepala*  
72b. Flowers yellow-green, pedicel 7–10 mm; lateral sepals ca. 1.8 cm; lower sepal navicular, with a recurved, slender spur ca. 1.5 cm ............................................. 202. *I. chloroxantha*

71b. Peduncles 2–3 cm, rarely to 6 cm, slender, inflorescences 2–4-flowered, divaricate.

73a. Bracts membranous, not linear or linear-lanceolate, caducous or persistent.  
74a. Leaves often crowded at apex of stem, ovate-lanceolate, margin crenulate or serrate; peduncles 3–5 cm, puberulent; flowers 2, pink, 8–12 mm; lateral sepals subovate or subfalcate; lower sepal funnelform, with an erect spur ca. 1.8 cm; plants of Hubei ........................................................................................................... 198. *I. exiguiflora*  
74b. Leaves remote, ovate or ovate-elliptic, margin coarsely crenate or crenate-serrate; peduncles shorter than leaves, glabrous; flowers (1 or)2 or 3(or 4), purple or pink, 25–35 mm in diam.; lateral sepals oblong-ovate; lower sepal narrowly funnelform, with a slightly curved or incurved spur 2–2.5 cm; plants of Jiangxi.  
75a. Bracts pink, ovate-cordate, ca. 8 mm; lateral sepals 8–9 mm, apically inconspicuously mucronulate; leaf blade basally without veins, lateral veins 7–9 pairs ................................................................. 199. *I. fenghwaiana*  
75b. Bracts purple, elliptic-ovate, 5–7 mm; lateral sepals apically conspicuously cuspidate; leaf blade with 1 or 2 pairs of stipitate glands on petiole, lateral veins 5 or 6 pairs ................................................................................ 200. *I. wuyuanensis*

73b. Bracts herbaceous, persistent.

76a. Peduncles longer or shorter than leaves, inflorescences 2- or 3-flowered; flowers white or green-white.  
77a. Peduncles overtopping leaves, inflorescences 2-flowered; flowers 1–1.5 cm in diam.; lateral sepals ovate, 6–7 mm, S-curved; leaf blade ovate or ovate-lanceolate, 3–6 cm, margin serrulate ................................................................. 193. *I. sigmoidea*  
77b. Peduncles shorter than leaves, inflorescences 2- or 3-flowered; flowers ca. 2.5 cm deep; lateral sepals obliquely orbicular, 8–10 mm in diam.; leaf blade ovate or elliptic-lanceolate, margin crenate or serrate ................................................................. 194. *I. nobilis*  
76b. Peduncles 2–6 cm, inflorescences 2- or 3-flowered, rarely 1- or 4-flowered; flowers yellow, purple, or pink.  
78a. Peduncles 4–6 cm, inflorescences 2- or 3-flowered; flowers yellow, ca. 4 cm; lateral sepals ovate-lanceolate, 3–4 mm; lower sepal narrowly funnelform, incurved, with a slender spur ca. 1 cm; leaf blade to 15 cm, papery, margin sharply serrate, near base stipitate ciliate; plants of Yunnan ........................................................................ 195. *I. divaricata*  
78b. Peduncles 2–3 cm, inflorescences (1 or)2- or 3-flowered; flowers pink-purple or pink, 2–2.5 cm; lateral sepals ovate, 3–7-veined; lower sepal narrowly funnelform, with spur ca. 1.2 cm or 2–2.5 cm; leaf blade 4–7 cm, membranous, margin crenate or coarsely serrate; plants of Zhejiang.  
79a. Inflorescences 2(or 3)-flowered, subdivaricate, peduncles 2–3 cm; bracts linear or linear-lanceolate, 3–6 mm; lateral sepals ovate-ornicular, 5–9-veined; mouth of lower sepal oblique, tip rostellate; leaf blade to 7 cm, with glands, lateral veins 5–7 pairs ................................................................. 196. *I. chekiangensis*  
79b. Inflorescences 1-flowered, peduncles 1.3–1.7 cm; bracts ovate-ornicular, to 3.5 mm; lateral sepals 3-veined; mouth of lower sepal vertical, tip mucronulate; leaf blade to 4 cm, without glands, lateral veins 3–5 pairs ........ 197. *I. taishunensis*
82a. Lower sepal saccate.
83a. Flowers purplish yellow; margin of leaf blade crenate-serrulate .............................................. 90. *I. leveillei*
83b. Flowers purple to bluish purple; margin of leaf blade sharply serrate or serrulate.
84a. Margin of leaf blade sharply serrate; plant 40–50 cm tall; flowers bluish purple ......................... 91. *I. abbatis*
84b. Margin of leaf blade sharply serrate; plant 60–70 cm tall; flowers purple or pink.
85a. Leaf blade linear-lanceolate or linear-oblong, 0.8–1.8 cm wide ................................................. 93. *I. linghziensis*
85b. Leaf blade ovate or ovate-lanceolate, 2–4.5 cm wide ............................................................... 92. *I. arguta*
82b. Lower sepal navicular or narrowly funnelform.
86a. Flowers yellow.
87a. Flowers ca. 2.5 cm deep; leaf blade 2.5–3 cm wide ................................................................... 55. *I. luchunensis*
87b. Flowers ca. 4 cm deep; leaf blade 4–6 cm wide .................................................................... 54. *I. maguanensis*
86b. Flowers purplish.
88a. Plants 10–30 cm tall, perennial; leaf blade 1.5–2 cm, apex acuminate; lower sepal narrowly
funnelform...................................................................................................................................... 56. *I. taronensis*
88b. Plants 1–2 m tall, annual; leaf blade 2.5–6 cm, apex acute; lower sepal navicular ..................... 57. *I. porphyrea*
81b. Lateral sepals 2; anthers obtuse or acute.
89a. Anthers obtuse.
90a. Flowers deeper than 3 cm.
91a. Lower sepals linear to lanceolate.
92a. Flowers pink; leaf blade 3–6 cm .......................................................... 148. *I. begoniiifolia*
92b. Flowers yellow; leaf blade 5–15 cm.
93a. Lower sepal navicular; abaxial midvein of upper petal cristate; leaf blade 4–7 cm wide, margin crenate ................................................................................................................. 146. *I. wuchengyihi*
93b. Lower sepal cornute; abaxial midvein of upper petal fine; leaf blade 2–3 cm wide, margin crenulate .................................................................................................................. 158. *I. arctosepala*
91b. Lower sepals ovate or oblong-ovate to orbicular.
94a. Flowers pink or reddish.
95a. Upper petal with abaxial midvein cristate; lower sepal navicular; leaf blade abaxially gray-green; plants of Yunnan ......................................................................................... 147. *I. yingjiangensis*
95b. Upper petal with abaxial midvein narrowly carinate; lower sepal funneliform; leaf blade abaxially pale green; plants of Guangdong, Guangxi, and Guizhou.
96a. Plants 60–100 cm tall, ± hairy .................................................................................. 109. *I. napoensis*
96b. Plants 30–40 cm tall, glabrous .................................................................................. 149. *I. chlorosepala*
94b. Flowers yellow or yellowish.
97a. Abaxial midvein of upper petal cristate.
98a. Plants to 30 cm tall, hairy .................................................................................. 145. *I. kamtilongensis*
98b. Plants more than 100 cm tall, glabrous ........................................................................ 151. *I. extensifolia*
97b. Abaxial midvein of upper petal carinate.
99a. Lower sepal navicular; leaf petiole 3–4 cm, blade adaxially green; plants 30–60 cm
tall ........................................................................................................................................ 143. *I. monticola*
99b. Lower sepal funneliform to saccate; leaf petiole 1–3 cm, blade adaxially dark green; plants 15–40 cm tall.
100a. Leaf blade 2.5–3.5 cm wide; stem glabrous ........................................................................ 142. *I. mengtszeana*
100b. Leaf blade 1–2 cm wide; stem ± hairy ........................................................................ 144. *I. trichosepala*
90b. Flowers shorter than 3 cm.
101a. Abaxial midvein of upper petal cristate or rostellate.
102a. Plants ± hairy.
103a. Plants more than 100 cm tall; leaf blade (10–)15–20 cm ..................................................... 159. *I. bodinieri*
103b. Plants 30–60 cm tall; leaf blade 3–10 cm.
104a. Flowers ca. 2.5 cm deep; abaxial midvein of upper petal cornute-carinate; leaf petiole
to 5 mm, base of leaf blade rounded, lateral veins 7–9 pairs ............................................. 101. *I. scabrida*
104b. Flowers ca. 3 cm deep; abaxial midvein of upper petal rostellate; leaf petiole
10–20 mm, base of leaf blade cuneate, lateral veins 4–6 pairs .................................................. 156. *I. ganpiuana*
102b. Plants glabrous.
105a. Lower sepal cornute; leaf margin crenulate ........................................................................ 105. *I. diaphana*
105b. Lower sepal funneliform or navicular; leaf margin crenate-serrate or serrate.
106a. Leaf blade 5–8 cm, lateral veins 6–10 pairs .............................................................. 155. *I. martinii*
106b. Leaf blade 2–4 cm, lateral veins 3–5 pairs.
107a. Plants 40–60 cm tall; lower sepal broadly funnelform or navicular; abaxial midvein of upper petal with conspicuous crista or sac ....................................................... 152. *I. rostellata*

107b. Plants 10–30 cm tall; lower sepal funnelform; abaxial midvein of upper petal cristate.

108a. Plants 10–20 cm tall; flowers solitary, pink; leaf blade 2–2.5 cm wide ............... 104. *I. trichopoda*

108b. Plants 20–30 cm tall; flowers 2–4, yellow; leaf blade 1–2 cm wide .................. 153. *I. alpicola*

101b. Abaxial midvein of upper petal carinate or thickened.

109a. Distal lobes of lateral united petals falcate basally ........................................... 102. *I. falcifer*

109b. Distal lobes of lateral united petals not falcate basally.

101a. Upper petal carinate or thickened.

109a. Distal lobes of lateral united petals falcate basally ........................................... 102. *I. serrata*

109b. Distal lobes of lateral united petals not falcate basally.

109a. Distal lobes of lateral united petals falcate basally ........................................... 102. *I. serrata*

110a. Lower sepal without a spur .................................................................................. 102. *I. serrata*

110b. Lower sepal with a spur.

111a. Plants (30–)40–80 cm tall; lower sepal navicular ............................................... 154. *I. crassiloba*

111b. Plants 15–40 cm tall; lower sepal saccate-funnelform, funnelform, or deeply navicular.

112a. Lower sepal deeply navicular or rarely subfunnelform.

112b. Lower sepal saccate-funnelform, funnelform, or rarely narrowly funnelform.

114a. Flowers yellow, ca. 1.5 cm deep; plants of Zhejiang ........................................ 139. *I. suichangensis*

114b. Flowers pink or pinkish purple, 1.5–2.5 cm deep; plants of Xizang and Yunnan.

115a. Plants 20–30 cm tall, perennial; flowers 2–2.5 cm deep; leaf blade 5–9 cm, margin crenate-serrate, lateral veins 9–11 pairs ......................................................... 51. *I. microcentra*

115b. Plants 5–20 cm tall, annual; flowers 1.5–2 cm deep; leaf blade 1–3.5(–5) cm, abaxially green, or purple spotted.

116a. Flowers ca. 2 cm deep; leaf blade 1–2 cm, papery, lateral veins 3 or 4 pairs ................................................................................................................................. 62. *I. tsangshanensis*

116b. Flowers 1.5–2 cm deep; leaf blade 2–3.5(–5) cm, membranous, lateral veins 5 pairs ................................................................................................................................. 50. *I. medogensis*

89b. Anthers acute.

117a. Flowers yellow.

118a. Lower sepal saggitate.

119a. Upper petal with horn ca. 1 cm; leaf margin crenulate-serrate .......................... 30. *I. longicornuta*

119b. Upper petal without a conspicuous horn; leaf margin serrate or coarsely serrate.

120a. Basal lobes of lateral united petal larger than distal lobes; apex of leaf blade subacute ......................................................................................... 97. *I. yunnanensis*

120b. Basal lobes of lateral united petals smaller than distal lobes; apex of leaf blade acuminate.

121a. Abaxial midvein of upper petal rostellate at middle, basal lobes of lateral united petals orbicular; peduncle 1–1.5 cm; leaf lateral veins 5–7 pairs ............................. 29. *I. conchibracteata*

121b. Abaxial midvein of upper petal keeled, basal lobes of lateral united petals ovate; peduncle 4–5 cm; leaf lateral veins 4 or 5 pairs .......................... 157. *I. lepida*

118b. Lower sepal funnelform or navicular.

122a. Stems prostrate or procumbent.

123a. Leaf blade rhombic or subrhombic, base cuneate; lower sepal navicular, with an erect, slender spur ................................................................................................. 112. *I. rhombifolia*

123b. Leaf blade ovate, ovate-elliptic, or ovate-lanceolate, base attenuate; lower sepal with an incurved spur.

124a. Flowers 2 or 3, yellow, ca. 2.5 cm deep; lateral sepals ovate, 3–5 mm, curved-falcate; distal lobes of lateral united petals dolabriiform; leaf blade 5–7 cm, margin crenate-serrate or serrate .............................................................. 110. *I. reptans*

124b. Flowers 1 or 2, golden yellow, 1.5–2 cm deep; lateral sepals obliquely ovate, slightly thick, 3–4 mm, with falcate process; distal lobes of lateral united petals obovate-oblong; leaf blade 2–3 cm, margin serrulate ....................................................... 111. *I. procumbens*

122b. Stems erect.

125a. Flowers pale yellow.

126a. Lower sepal funnelform; leaf blade 5–10 × 3–4.5 cm ........................................ 136. *I. potaninii*

126b. Lower sepal navicular; leaf blade 3–5(–7) × 2.5–3 cm ..................................... 137. *I. bellula*

125b. Flowers yellow.
127a. Leaf blade 1.5–2 cm wide, margin spinescent-serrate ................................................. 95. *I. atherosepala*
127b. Leaf blade 2–4 cm wide, margin serrate or crenate.

128a. Margin of leaf blade serrulate; abaxial midvein of upper petal cornute below middle ... 96. *I. labordei*
128b. Margin of leaf blade coarsely or moderately serrate or crenate; abaxial midvein of upper petal keeled or with a small sac at middle.

129a. Abaxial midvein of upper petal with a small sac at middle; apex of leaf blade acute ................................................................. 125. *I. lucorum*
129b. Abaxial midvein of upper petal keeled; apex of leaf blade caudate-acuminate.

130a. Base of leaf blade cuneate, attenuate into petiole, margin serrate or serrate, lateral veins 6–8 pairs ..................................................................................................................... 131. *I. meyana*
130b. Base of leaf blade broadly cuneate, margin coarsely serrate, lateral veins 4 or 5 pairs ................................................................. 157. *I. lepida*

117b. Flowers purple.

131a. Lower sepal saccate.

132a. Stems winged .................................................................................................................... 115. *I. uniflora*
132b. Stems wingless.

133a. Abaxial midvein of upper petal conspicuously carinate with an apical horn, distal lobes of lateral united petals falcate-flabellate; leaf blade abaxially pale green; plants of Sichuan and Yunnan ............................................................. 129. *I. forrestii*
133b. Abaxial midvein of upper petal inconspicuously carinate with an apical horn, distal lobes of lateral united petals dolabriform; leaf blade abaxially purple; plants of Henan and Shanxi ........................................................................ 119. *I. henanensis*

131b. Lower sepal funnelform, navicular, or cornute.

134a. Lower sepal cornute.

135a. Flowers not more than 2 cm in diam.; pedicels and bracts puberulent; peduncle 2–3 cm; leaf blade membranous ................................................................. 120. *I. imbecilla*
135b. Flowers more than 2 cm in diam.; pedicels and bracts glabrous; peduncle 5–10 cm; leaf blade papery .............................................................................................................................. 122. *I. faberi*

134b. Lower sepal not cornute.

136a. Stems prostrate or procumbent.

137a. Leaf blade membranous, to 1.8 cm wide, adaxial surface pilose on veins, lateral veins 5 or 6 pairs; lateral sepals apically reflexed, long mucronulate; lateral united petals not clawed, distal lobes broadly dolabriform; plants to 100 cm tall ............ 108. *I. tienchuanensis*
137b. Leaf blade rigidly papery, 3–3.5 cm wide, margin and adaxial surface strigose on veins, lateral veins 5–7 pairs; lateral sepals apically cuspidate or mucronulate; lateral united petals clawed or ± clawed, distal lobes suborbicular or dolabriform; plants 40–60 cm tall.

138a. Bracts lanceolate or linear-lanceolate; lateral united petals clawed, distal lobes suborbicular, indistinctly auriculate; margin of leaf blade serrate; plants to 40 cm tall ........................................................................................................... 106. *I. commelinoides*
138b. Bracts ovate or ovate-lanceolate; lateral united petals ± clawed, distal lobes dolabriform, with lunate reflexed auricle; margin of leaf blade crenate-serrate; plants to 60 cm tall ............................................................................................... 107. *I. fanjingshanica*

136b. Stems erect.

139a. Stems simple or rarely branched at middle.

140a. Leaf blade 3–5 cm; plants less than 20 cm tall ................................................................. 114. *I. pudica*
140b. Leaf blade 5–15 cm; plants 30–100 cm tall.

141a. Abaxial midvein of upper petal inconspicuously keeled and without any appendage; plants ca. 30 cm tall ................................................................. 98. *I. trigonosepala*
141b. Abaxial midvein of upper petal conspicuously keeled and cristate.

142a. Apex of upper petal with a beak ca. 5 mm ................................................................. 99. *I. recurvicornis*
142b. Apex of upper petal not beaked.

143a. Leaf blade elliptic or elliptic-lanceolate, margin crenate ........................................ 89. *I. puberula*
143b. Leaf blade ovate to ovate-lanceolate or ovate-oblong, margin coarsely and sharply serrate ............................................................................... 94. *I. lemmeei*

139b. Stems branched or repent basally.

144a. Limb of lower sepal funnelform; flowers solitary.

145a. Leaves basally without glands; lateral sepals lanceolate, basally denticulate, abaxial midvein keeled; lower sepal with a slender spur 1–1.5 cm; pedicule
145b. Leaves basally with 1 or 2 glands; lateral sepals narrowly ovate, margin sometimes denticulate on one side, abaxial midvein with a narrow wing; lower sepal with a long, incurved spur to 4.5 cm; peduncle 3–4.4 cm.

146a. Margin of leaf blade crenate, base with 2 globose glands; lateral sepals ovate, margin sometimes denticulate on one side; distal lobes of lateral united petals broadly oblong; lower sepal narrowly funnelform with a slender, incurved spur ................................................................. 116. *I. pterosepala*

146b. Margin of leaf blade serrate, base with 1–3 pairs of globose glands; lateral sepals ovate-orbicular, inequilateral, margin entire; distal lobes of lateral united petals oblong; lower sepal broadly funnelform with a slightly incurved spur ca. 3.5 cm ........................................................................ 117. *I. neglecta*

144b. Lower sepal cornute or navicular (but funnelform or saccate in a few species); inflorescences of 2 or 3 fascicled flowers, racemose, or flowers solitary (*I. piufanensis* and *I. odontophylla*).

147a. Auricle of lateral united petals elongate and linear, inserted in spur of lower sepal; lower sepal erect or incurved.

148a. Flowers more than 2 cm in diam., purple-red; pedicels and bracts glabrous; peduncle 5–10 cm; leaf blade papery ......................................................... 122. *I. faberi*

148b. Flowers not more than 2 cm in diam.; pedicels and bracts puberulent; peduncle 2–3 cm; leaf blade membranous.

149a. Flowers reddish or pink; bracts linear-lanceolate, caducous; distal lobes of lateral united petals dolabriform, apex rounded; lower sepal cornute, with an erect spur; leaf blade adaxially dark green, abaxially gray-green ........................................... 120. *I. imbecilla*

149b. Flowers pink-purple; bracts lanceolate, persistent; distal lobes of lateral united petals broadly incised; lower sepal navicular, with an incurved, short spur; leaf blade adaxially green, abaxially pale green ........................................................................ 121. *I. distracta*

147b. Auricle of lateral united petals not elongate, not inserted in spur of lower sepal; lower sepal incurved or involute.

150a. Limb of lower sepal navicular.

151a. Leaf blade rigid, margin crenate or crenate-serrate, basally with stipitate glands; flowers pink-purple; lateral sepals rigid, cordate; abaxial midvein of upper petal rostrate or shortly carinate at middle, distal lobes of lateral united petals large, dolabriform, apically broadly incised ................................................................. 140. *I. amabilis*

151b. Leaf blade membranous, margin serrate, base without glands; flowers purple; lateral sepals herbaceous, ovate; abaxial midvein of upper petal green, clavate, erect, rostellate at middle, distal lobes of lateral united petals dolabriform, apically incised ................................................................. 141. *I. rectirostrata*

150b. Limb of lower sepal funnelform.

152a. Stem base or nodes of lower part swollen to tuberiform with adventitious roots.

153a. Stem basally procumbent, lower nodes swollen to tuberiform; leaf blade ovate-lanceolate, lateral veins 4 or 5 pairs, abaxially spinose on veins; basal lobes of lateral united petals rounded-obtuse; lower sepal with spur ca. as long as limb ................................................................. 126. *I. piufanensis*

153b. Stem erect, base with subglobose tuber; leaf blade narrowly oblong or linear-lanceolate, lateral veins 7 pairs, adaxially brown pilose; basal lobes of lateral united petals mucronulate; lower sepal with a slender spur 10–12 mm ........................................................................ 127. *I. epilobioides*

152b. Stem base and lower nodes without swollen globose tuber.

154a. Leaf blade rigidly papery, margin inconspicuously serrulate ........................................ 133. *I. bachii*

154b. Leaf blade membranous, margin coarsely serrate or serrate.

155a. Inflorescences 2- or 3-flowered; lateral sepals orbicular ................. 128. *I. oxyanthera*

155b. Inflorescences 1- or 2-flowered; lateral sepals ovate or ovate-lanceolate.

156a. Peduncles ca. as long as leaves, inflorescences 1- or 2-flowered; bracts lanceolate; flowers violet, 3–5 cm deep; lateral sepals ovate-falcate, ca. 7 mm, 5-veined; lower sepal with an incurved, slender spur ca. 2 cm; leaf blade adaxially dark green, abaxially pale green; plants to 60 cm tall ........ 130. *I. lilacina*

156b. Peduncles shorter than leaves, inflorescences 1-flowered; bracts linear-lanceolate; flowers pink, ca. 2 cm deep, purple spotted; lateral sepals
ovate-lanceolate, ca. 5 mm, 3-veined; lower sepal with a short, curved spur; leaf blade adaxially green, abaxially gray-green; plants to 25 cm tall ......................................................... 132. *I. odontophylla*

80b. Inflorescences more than 3-flowered.

157a. Flowers 4–5 cm; lower sepal saccate or saccate-funnelform.

158a. Lateral sepal 2.

159a. Flowers white, red striate; bracts herbaceous, lanceolate .............................................. 31. *I. rubrobriata*

159b. Flowers yellow; bracts fleshy, broadly ovate.

160a. Leaves submembranous, adaxially green; upper part of stem sparsely pubescent; lateral veins 5 or 6 pairs; lateral sepal obliquely ovate ............................................... 28. *I. hunanensis*

160b. Leaves papery, adaxially dark green; upper part of stem gray-brown or yellow-brown tomentose; lateral veins 5–9 pairs; lateral sepals ovate or orbicular.

161a. Leaf blade ovate or ovate-elliptic, lateral veins 7–9 pairs; lateral sepals thickening, obovate, many veined; lateral united petals shortly clawed, distal lobes dolabrilform ........................................... 26. *I. duclouxi*

161b. Leaf blade ovate-lanceolate, lateral veins 5–7 pairs; lateral sepals membranous, orbicular, veins reticulate; lateral united petals not clawed, distal lobes broadly ovate ............................................. 27. *I. cyclosepala*

158b. Lateral sepals 4, outer 2 ovate or obliquely ovate, inner 2 narrowly linear or linear-lanceolate.

162a. Leaves remote on stem; peduncles axillary, much longer than leaves; lower sepal subglobose or cup-shaped ................................................................. 12. *I. chimiliensis*

162b. Leaves crowded at upper part of stem; peduncles terminal or axillary, shorter than leaves or equaling leaves; lower sepal saccate or broadly funnelform.

163a. Flowers yellow, yellowish, or pink; lower sepal saccate.

164a. Plants perennial.

165a. Peduncles shorter than leaves, inflorescences 4–7-flowered; bracts membranous, ovate-oblong; flowers yellowish, throat red or red-purple spotted; lateral united petals clawed, to 3 cm ................................................................. 13. *I. hongkongensis*

165b. Peduncles longer than leaves or as long as leaves, inflorescences 3–8–13-flowered; bracts leathery, ovate or navicular; flowers yellow, lower sepal red-brownish striate; lateral united petals broadly clawed, ca. 2 cm .................................. 14. *I. pritzelii*

164b. Plants annual.

166a. Flowers yellow; lower sepal saccate.

167a. Leaves lanceolate or oblong-lanceolate, apex acuminate; peduncles shorter than leaves, inflorescences 3– or 4-flowered; abaxial midvein of outer sepals with a narrow wing; lateral united petals clawed, to 3 cm ......................................................... 15. *I. tubulosa*

167b. Leaves obovate or spatulate, apex acute; peduncles ca. as long as leaves, inflorescences 2–4-flowered; outer sepals with conspicuous veins; lateral united petals not clawed, to 2 cm, distal lobes subdolabrilform, emarginate; lower sepal with a short spur ............. 16. *I. spatulata*

166b. Flowers pink; lower sepal broadly funnelform

168a. Leaf blade ovate-oblong, lateral veins 5–7 pairs; inflorescences 2–5-flowered; flowers 2–3.5 cm; basal lobes of lateral united petals obliquely ovate, distal lobes oblong, apically obtuse ................................................................. 17. *I. chishuiensis*

168b. Leaf blade oblunget-lanceolate or lanceolate, lateral veins 7–11 pairs; inflorescences 3–8–11-flowered; flowers 4–4.5 cm; basal lobes of lateral united petals obovate, distal lobes oblong-dolabrilform, apically slightly acute ............................................. 18. *I. guizhouensis*

163b. Flowers yellow or white; lower sepal saccate or saccate-funnelform.

169a. Flowers to 5 cm; lower sepal saccate, with an involute or cochleate, slender spur 2–3 cm .................................................................................................................. 19. *I. apalophylla*

169b. Flowers smaller; lower sepal saccate to funnelform, with a stout or short spur ca. 1/2 as long as limb.

170a. Anthers apically acute.

171a. Petiole 3.5–5 cm, leaf blade 9–12 × 3.5–4 cm; peduncle ca. 1.5 cm; pedicel ca. 1.5 cm; flowers ca. 2 cm, spur ca. 8 mm ................................................................. 21. *I. clavigeroides*

171b. Petiole to 2.5 cm, leaf blade 7–9 × 2.5–3.5 cm; peduncle 2–2.5 cm; pedicel ca. 1 cm; flowers ca. 3 cm, spur ca. 4 mm ................................................................. 22. *I. linearisepala*

170b. Anthers apically obtuse.

172a. Lower sepal with an involute or incurved, short spur, not longer than 1 cm.

173a. Flowers yellow, upper petal triangular-orbicular, apex obtuse; lower sepal narrowly funnelform, with an involute, stout spur; leaf petiole 4–6 cm, not glandular;
inflorescences terminal ................................................................. 24. *I.* *omeiana*

173b. Flowers white, upper petal elliptic, apex mucronulate; lower sepal saccate, with a very short, curved spur; leaves shortly petiolate or subsessile, base remotely glandular; inflorescences axillary ................................................................. 25. *I.* *wilsonii*

172b. Lower sepal with spur ca. 1 cm, ca. 1/2 as long as limb.

174a. Stem robust, usually winged; leaf blade membranous, oblanceolate or obovate, margin crenate-serrate, lateral veins 5 or 6 pairs, petiole 1–2 cm; bracts smaller, caducous ........................................................................................................... 20. *I.* *clavigera*

174b. Stem fleshy, wingless; leaf blade rigid, oblong or ovate-oblong, margin inconspicuously denticulate, serrulate, or nearly entire, lateral veins 9–12 pairs, petiole 5–12 cm; bracts ca. 1.5 cm, herbaceous ........................................................................................................... 23. *I.* *balansae*

157b. Flowers medium-sized or smaller, not more than 4 cm; lower sepal funnelform, cup-shaped, narrowly funnelform, or corunate.

175a. Distal lobes of lateral united petals loriform or narrowly lanceolate.

176a. Lateral sepals 4, outer 2 ovate or falcate-elliptic, inner 2 minute, linear or subulate.

177a. Leaves crowded at apices of stem and branches, oblong-ovate or oblong-lanceolate; inflorescences 4–6-flowered; lower sepal with a cylindric, erect spur ca. as broad as limb ... 52. *I.* *holocentra*

177b. Leaves along stem remotely arranged, linear or linear-oblong; inflorescences 8–12-flowered; lower sepal with a narrowed, curved, slender spur ca. 14 mm .............. 53. *I.* *tongbiguanensis*

176b. Lateral sepals 2.

178a. Apices of lateral sepals and tip of mouth of lower sepal rostellate or with a long horn; flowers purple or pink-purple .............................................................................................. 49. *I.* *tenuibracteata*

178b. Apices of lateral sepals and tip of mouth of lower sepal cuspidate, rostellate or long aristate; flowers yellow or golden-yellow.

179a. Lateral sepals navicular or narrowly oblong, apex cuspidate; tip of mouth of lower sepal shortly rostellate or acuminate; bracts persistent.

180a. Flowers yellow, purple spotted; lateral sepals ovate, apex apiculate; lower sepal navicular, mouth abruptly curved, tip of mouth acuminate, with spur ca. 15 mm; plants to 80 cm tall ........................................................................................................ 42. *I.* *dolichoceras*

180b. Flowers golden-yellow or yellow, not spotted; lateral sepals oblong, ovate-oblong, or navicular, apex often obtuse; tip of mouth of lower sepal acute or shortly rostellate; plants 40–60 cm tall.

181a. Flowers yellow, to 2 cm; lateral sepals oblong, 2–3 mm, apex obtuse, slightly thickening, midvein stout; lower sepal cornute, mouth ascending, tip of mouth acute ..................... 40. *I.* *dichroa*

181b. Flowers golden-yellow, ca. 3 cm; lateral sepals navicular, ca. 5 mm, membranous, broader on one side, 3–5-veined; lower sepal narrowly funnelform, mouth ascending, tip of mouth shortly rostellate .............................................................................................. 41. *I.* *siculifer*

179b. Lateral sepals ovate-oblong or oblong-lanceolate, acuminate or hooked-falcate; tip of mouth of lower sepal slightly acute, cornute-rostellate or long aristate; bracts caducous.

182a. Lateral sepals ovate-oblong or oblong-lanceolate, apex acuminate; tip of mouth of lower sepal not aristate.

183a. Peduncles distinctly overtopping leaves, 3–5.3 cm; bracts subulate or subulate-lanceolate, apically without glands; tip of mouth of lower sepal obtuse or slightly acute, with a hooked, long spur; plants occurring at ca. 4100 m elevation .............................. 43. *I.* *longipes*

183b. Peduncles usually shorter than leaves; bracts ovate-lanceolate; tip of mouth of lower sepal cornute-rostellate, with a slightly curved, slender, long spur; plants occurring up to 3000 m elevation .............................................................................................. 44. *I.* *stenantha*

182b. Lateral sepals falcate or hooked-curved, apex long aristate; tip of mouth of lower sepal with a long horn or long aristate.

184a. Flowers ca. 2.5 cm, pink, purple-brown striate; bracts linear, persistent .......................... 48. *I.* *ceratophora*

184b. Flowers smaller, yellow or orange-yellow, red spotted; bracts ovate or ovate-lanceolate, caducous.

185a. Leaves rigid, blade to 2.5 cm wide; peduncles overtopping leaves or ca. as long as leaves, inflorescences 3–5-flowered; lateral sepals hooked-curved, with awn 3–4 mm; tip of mouth of lower sepal fibrous, sometimes involute aristate; plants to 30 cm tall .............................................................................................. 45. *I.* *principis*

185b. Leaves membranous, blade 4–6 cm wide; peduncles overtopping or shorter than leaves, inflorescences 5–12-flowered; lateral sepals falcate, with a long awn; tip
of mouth of lower sepal with a long horn or rostellate; plants 60–110 cm tall.

186a. Bracts ovate-lanceolate, smaller, glandular cuspidate; upper petal orange-yellow, abaxial midvein slightly spurred; tip of mouth of lower sepal with a long green horn, with a helicoid, incurved spur; leaf blade apically acuminate; plants to 110 cm tall ................................................................. 46. *I. drepanophora*

186b. Bracts navicular-ovate, 8–10 mm, aristate; upper petal yellowish, abaxial midvein without a process; tip of mouth of lower sepal rostellate, with a slender, erect or curved spur; leaf blade apically acute; plants to 60 cm tall ......................... 47. *I. ruiliensis*

175b. Distal lobes of lateral united petals dolabiform or semilunar or ovate.

187a. Flowers medium-sized, usually deeper than 2 cm.

188a. Upper petal with cristate midvein.

190a. Flowers golden yellow, ca. 2.5 cm deep, with a saccate lower sepal; leaf blade lanceolate or ovate-lanceolate ................................................................................................................. 100. *I. cristata*

190b. Flowers yellow, ca. 1.8 cm deep, with a funnelform lower sepal; leaf blade ovate-elliptic ................................................................. 153. *I. alpicola*

188b. Flowers purple, blue-purple, pink, pale purple, or pale pink, very rarely with light yellow shade.

197a. Leaf blade rhombic-ovate or rhombic-lanceolate.

198a. Stems and peduncles with dense red-purple glandular hairs; flowers 2.5–4 cm deep ............ 59. *I. textorii*

198b. Stems and peduncles with sparse glandular hairs or without glandular hairs; flowers ca. 2 cm deep ............................................................................................................................... 58. *I. furcillata*

197b. Leaf blade not rhombic-ovate or rhombic-lanceolate.

199a. Flowers blue-purple to blue-violet or rarely purple to pale blue-purple.

200a. Bracts caducous.

201a. Inflorescences 3- or 4-flowered ....................................................................................................... 37. *I. blinii*

201b. Inflorescences more than 5-flowered.

202a. Distal lobes of lateral united petals with a rounded apex; pedicel 9–11 mm .......... 36. *I. cyanantha*

202b. Distal lobes of lateral united petals with a retuse apex; pedicel 16–20 mm ....... 64. *I. hancockii*

200b. Bracts persistent.

203a. Lower sepal broadly sigmoid-curved-saccate .............................................................................. 71. *I. bicornuta*

203b. Lower sepal obliquely or broadly funnelform.

204a. Flowers 3.5–5 cm deep; distal lobes of lateral united petals lanceolate ................ 38. *I. purpurea*

204b. Flowers 2–2.5 cm deep; distal lobes of lateral united petals dolabiform .................. 67. *I. fragicolor*

199b. Flowers pink or pinkish.

205a. Bracts caducous.

206a. Inflorescences 3–5-flowered; flowers 2.5–3 cm deep ......................................................... 61. *I. uliginosa*

206b. Inflorescences 6–12-flowered; flowers 3–4 cm deep.

207a. Leaf blade 4–7 cm wide; flowers ca. 3 cm deep ......................................................... 39. *I. pseudokingii*

207b. Leaf blade 1.5–2.5 cm wide; flowers 3.5–4 cm deep ............................................................. 60. *I. aquatilis*

205b. Bracts persistent.

208a. Flowers 3–3.5 cm deep.

209a. Flowers ca. 3 cm deep; lower sepal navicular-cornute; leaves alternate .......... 124. *I. lateristachys*

209b. Flowers 3–3.5 cm deep; lower sepal saccate; leaves opposite or verticillate .......... 65. *I. sulcata*
208b. Flowers 1.5–2.5 cm deep.

210a. Bracts ovate-lanceolate.

211a. Flowers ca. 2 cm deep; all leaves sessile; bases of upper and middle leaves amplexicaul ......................................................... 68. *I. amplexicaulis*

211b. Flowers 1.5–1.7 cm deep; lower and middle leaves shortly petiolate; bases of upper and middle leaves not amplexicaul ........................................... 69. *I. chungtienensis*

210b. Bracts linear or narrowly lanceolate to lanceolate.

212a. Flowers 1.5–2.5 cm deep; basal lobes of lateral united petals rounded at apex, distal lobes of lateral united petals slightly acute at apex; apex of bract without glandular hairs ...................................................... 63. *I. jinggangensis*

212b. Flowers ca. 2 cm deep; basal lobes of lateral united petals acute at apex, distal lobes of lateral united petals rounded at apex; apex of bract with glandular hairs ................................................................................. 66. *I. thomsonii*

187b. Flowers small, usually less than 1.5(–2) cm deep except spur.

213a. Lower sepal without spur, navicular ..................................................................................... 88. *I. margaritifera*

213b. Lower sepal with spur, funnelform, navicular, or obconical.

214a. Bracts caducous or nearly persistent.

215a. Stem slender; flowers pale purple, 8–9 mm; lateral sepals falcate; capsule shortly clavate, 5-angled, tuberculate ............................................................................................ 84. *I. tuberculata*

215b. Stem relatively stout, rigid; flowers yellow, 5–10 mm in diam.; lateral sepals falcate; capsule linear or narrowly terete, not tuberculate.

216a. Lateral sepal falcate-ovate, narrowly ovate, or obliquely lanceolate.

217a. Stem and branches sparsely stipitate glandular; bracts lanceolate, apex glandular aristate; flowers orange; lateral sepals obliquely lanceolate, glandular aristate; seeds tuberculate ...................................................................................................................... 85. *I. polyceras*

217b. Stem and branches without glands; bracts ovate or oblong, apex not aristate; flowers yellow; lateral sepals ovate or oblong, not glandular aristate; seeds smooth.

218a. Inflorescences racemose; peduncles many, crowded at apices of branches, usually shorter than leaves; lateral sepals falcate-ovate, 3-veined; abaxial midvein of upper petal narrowly cristate; lower sepal with an incurved spur 2–2.5 cm ...................... 86. *I. desmantha*

218b. Inflorescences corymbose; peduncles slender, in axils of upper part, distinctly overtopping leaves; lateral sepals narrowly ovate or oblong, midvein stout, not veined; abaxial midvein of upper petal without a process, lower sepal with a curved spur ca. 2 × as long as limb ............................................................................ 87. *I. gracilipes*

216b. Lateral sepal ovate to orbicular or suborbicular.

219a. Flowers less than 1 cm deep; leaves often crowded ........................................................ 138. *I. fargesii*

219b. Flowers 1–2 cm deep; leaves not crowded.

220a. Flowers 1 cm deep, white; lateral sepals lorate; margin of leaf blade serrulate or crenate-mucronulate ................................................................................. 113. *I. membranifolia*

220b. Flowers 1–2 cm deep, yellow; lateral sepals orbicular or suborbicular; margin of leaf blade crenate or crenulate.

221a. Flowers 1–1.5 cm deep, yellow; leaf lateral veins 6–8 pairs ........................................... 134. *I. crenulata*

221b. Flowers 1.5–2 cm deep, pale yellow; leaf lateral veins 2–4 pairs .............................. 135. *I. henryi*

214b. Bracts persistent.

222a. Flowers many, pale purple to yellowish white, fascicled or verticillate, radiately arranged .............................................................................................................. 74. *I. radiata*

222b. Flowers several, alternate, white, pink, or yellow, in racemes or corymb.

223a. Lateral united petals very shortly auriculate or without auricle; lower sepal conic or navicular.

224a. Flowers white or pink; lateral sepals ovate or ovate-subulate, 3-veined, apex glandular apiculate, margin without glands; lower sepal navicular, with an erect, short spur ...... 76. *I. laxiflora*

224b. Flowers yellow or yellowish; lower sepal conical, with an incurved, long spur.

225a. Lateral sepals falcate or obliquely ovate, apex aristate; leaf blade membranous, lateral veins 7–9 pairs ................................................................................. 75. *I. racemosa*

225b. Lateral sepals ovate-orbicular, apex obtuse; leaf blade papery, lateral veins 6 or 7 pairs ............................................................................................... 123. *I. microstachys*

223b. Lateral united petals orbicular; lower sepal navicular, with a long, curved spur.

226a. Flowers ca. 1 cm in diam.

227a. Flowers pink; upper petal with abaxial midvein not carinate; lower sepal navicular,

Lee feng xian

*Impatiens cosmia* J. D. Hooker; *I. crassicornu* J. D. Hooker.

Plants annual, 30–60 cm tall. Stem erect in upper part, prostrate basally, slender, glabrous; nodes slightly swollen, with adventitious roots. Leaves opposite, sessile or subsessile; leaf blade gray-green abaxially, green adaxially, linear or linear-lanceolate, rarely obovate, 2–10 × 0.5–1 cm, rigidly papery, with stipular basal glands, abaxially glabrous, adaxially scabrous, lateral veins 5–7 pairs, inconspicuous, base subcordate, truncate, or rounded, margin remotely spiniform-serrate, apex acute or slightly obtuse. Inflorescences 1-flowered, or flowers 2- or 3-fascicled in leaf axils; peduncles absent. Pedicels 2–4.4 cm, slender, often scabrous hairy on one side, bracteate at base; bracts linear. Flowers purple-red or white, large. Lateral sepals 2, linear, ca. 1 × 0.1 cm, apex acute. Lower sepals narrowly ovate, ca. 1.5 cm deep, striate, gradually narrowed into an incurved or involute, slender spur. Upper petal orbicular, ca. 1 cm in diam., apex emarginate, mucronulate, abaxial midvein narrowly carinate; lateral united petals not clawed, 1.4–1.5 cm, 2-lobed; basal lobes suborbicular, small; distal lobes broadly ovate to dolabriliform (axe-shaped), apex rounded-obtuse; auricle narrow. Stamens 5; filaments linear, compressed; anthers ovoid-orbicular, apex obtuse. Ovary fusiform. Capsule elliptic, turgid at middle, glabrous. Seeds black, globose, ca. 2 mm in diam., shiny. Fl. Jun–Aug, fr. Sep–Nov. 2n = 16.

Often beside ponds, stream sides, field margins, swamps; 100–1200 m. Anhui, Fujian, Guangdong, Guangxi, Hainan, Hunan, Jiangxi, Yunnan, Zhejiang [India, Malaysia, Myanmar, Thailand, Vietnam].

The whole plant is used medicinally for relieving fever and pain, removing toxic materials, promoting blood circulation, treating diarrhea, curing urinary infections, and healing carbuncles.


Feng xian hua

*Balsamina hortensis* Desportes (1816), not A. St.-Hilaire (1808).

Plants annual, 60–100 cm tall. Stem erect, robust, base ca. 8 mm in diam., succulent, simple or branched, glabrous or laxly pubescent when young, with many fibrous roots, lower nodes swollen. Leaves alternate, sometimes lowest ones opposite; petiole 1–3 cm, adaxially shallowly sulcate, both sides with few pairs of stipitate glands; leaf blade lanceolate, narrowly elliptic, or oblanceolate, 4–12 × 1.5–3 cm, with a pair of sessile black glands toward base, both surfaces glabrous or sparsely pubescent, lateral veins 4–7 pairs, base cuneate, margin deeply serrate, apex acuminate. Inflorescences 1-flowered, or 2 or 3 flowers fascicled in leaf axils, without peduncles. Pedicels 2–2.5 cm, densely pubescent, bracteate at base; bracts linear. Flowers white, pink, or purple, simple or double petalous. Lateral sepals 2, ovate or ovate-lanceolate, 2–3 cm. Lower sepals narrowly triangular, 13–19 × 4–8 mm, pubescent, abruptly narrowed into an incurved spur; spur 1–2.5 cm, slender. Upper petal orbicular, apex retuse, mucronulate, abaxial midvein narrowly carinate; lateral united petals shortly clawed, 2.3–2.5 cm, 2-lobed; basal lobes obovate-oblong, small; distal lobes suborbicular, apically retuse; auricle narrow. Stamens 5; filaments linear; anthers ovoid, apex obtuse. Ovary fusiform, densely pubescent. Capsule broadly fusiform, 1–2 cm, densely tomentose, narrowed at both ends. Seeds many, black-brown, globose, 1.5–3 mm in diam., tuberculate. Fl. Jul–Oct. 2n = 14*.

A common ornamental plant, widely cultivated in gardens and houses throughout China [native to SE Asia; cultivated worldwide].
The flowers and leaves are often used for coloring fingernails. The stem and seeds are used medicinally for promoting blood circulation and for relieving pain and sore throats.


**缅甸凤仙花 mian dian feng xian hua**

Plants erect, small, 15–20 cm tall. Stem erect, simple. Leaves alternate, petiolate or subsessile; petiole 5–12 mm; leaf blade whitish abaxially, green adaxially, ovate-lanceolate, 3–5 × 1.5–2 cm, rigid, both surfaces spreading multicellular pubescent, ciliate along basal margin, ciliae at basal part 1–3 mm, lateral veins 4 or 5 pairs, base gradually attenuate into petiole, margin inconspicuously crenate or nearly entire, apex acute. Inflorescences 1-flowered in upper leaf axils. Pedicels 2–3 cm, slender, spreading pubescent, base 2-bracteate or with 1 small bract only. Flowers pink-purple, ca. 2 cm, ca. 3.5 cm deep. Lateral sepals 2, narrowly subulate, 1–1.5 mm, apex slightly awned. Lower sepal navicular, 1–3 cm deep, gradually narrowed into a slender spur, mouth oblique, 0.8–1 cm, tip acute. Upper petal pink-purple, broadly obovate, ca. 0.9 × 1.2 cm, apex retuse, abaxial midvein thickened, puberulent, narrowly crenate; lateral united petals not clawed, short, ca. 1.2 cm, 2-lobed; basal lobes broadly oblong, ca. 9 × 5 mm, apex slightly retuse-truncate; distal lobes triangular-ovate, ca. 8 × 6 mm, apex rounded or emarginate; auricle suborbicular. Fillaments subulate, short; anthers ovoid, small, apex obtuse. Ovary ovoid, 4–5 mm, puberulent, apex acute. Capsule fusiform, ca. 1.5 cm, tomentose. Seeds few, brown, oblong, 3–5 mm, glabrous. Fl. Jul–Sep. 2n = 12.

Broad-leaved forests, riverbanks; 700–1700 m. SW Yunnan [Myanmar].


**苏丹风仙花 su dan feng xian hua**

*Impatiens holstii* Engl. & Warburg; *I. sultanii* J. D. Hooker.

Plants perennial, succulent, green or reddish tinged, 30–70 cm tall, simple or branched, glabrous or slightly pubescent at shoot apices. Leaves alternate; petiole 1.5–6 cm, with 1 or 2, rarely few, stipitate glands; leaf blade broadly elliptic or ovate to oblong-elliptic, 4–12 × 2.5–5.5 cm, with 1 or 2, rarely few, stipitate basal glands, glabrous, lateral veins 5–8 pairs, base cuneate, rarely ± rounded, attenuate into petiole, margin crenate-denticulate, apex acute or acuminate, or somewhat cuspidate. Inflorescences in leaf axils of upper stem and branches, usually 2(–5)-flowered, sometimes 1-flowered; peduncles 3–5 cm. Pedicels 1.5–3 cm, slender, bracteate at base; bracts linear-lanceolate or subulate, ca. 2 mm, apex acute. Flowers variable in size and color: red, crimson-red, pink, purple-red, purplish violet, or white. Lateral sepals 2, greenish or whitish, ovate-lanceolate or linear-lanceolate, 3–7 mm, apex acute. Lower sepal shallowly navicular, 0.8–1.5 cm deep, abruptly constricted into a curved spur; spur filiform, 2.4–4 cm. Upper petal broadly obcordate or obovate, 1.5–1.9 × 1.3–2.5 cm, apex emarginate, cuspidate, abaxial midvein narrowly cristate; lateral united petals not clawed, 1.8–2.5 cm, 2-lobed; basal and distal lobes nearly equal in size and shape; basal lobes obovate or obovate-spatulate, 1.4–2 × ca. 1.4 cm; distal lobes 1.2–2.3 × ca. 1.8 cm, margin entire or emarginate. Ovary fusiform, ca. 4 mm, glabrous. Capsule fusiform, 1.5–2 cm, glabrous. Fl. Jun–Oct. 2n = 16.

Coastal forest areas, riverine thickets, river margins, shaded places, humid places, also cultivated in gardens and greenhouses; ca. 1800 m. Guangdong, Hebei [native to E Africa; widely cultivated in many parts of the world].

A beautiful ornamental plant, this species is very variable in leaf shape and flower color.

5. Impatiens bracteata Colebrooke ex Roxburgh, Fl. Ind. 2: 459. 1824.

**睫苞凤仙花 jie bao feng xian hua**

*Impatiens fimbriata* Hooker.

Plants annual, 30–40 cm tall. Stem erect, simple or slightly branched in lower part, glabrous or slightly pubescent in upper part. Leaves opposite or alternate, rarely verticillate; petiole long, 0.5–2 cm, sparsely pubescent; leaf blade ovate or ovate-lanceolate, 4–6 × 2.5–4 cm, abaxially slightly pubescent on veins, adaxially sparsely or densely adpressed hairy, lateral veins 7 or 8 pairs, margin crenate-serrate, apex acute or acuminate. Inflorescences terminal, occasionally axillary, erect, subumbellate or densely racemose, 4–8-flowered; peduncles 1.5–6 cm. Pedicels bracteate at base; bracts linear, ciliate. Flowers pink-purple or purple, small. Lateral sepals 2, lanceolate. Lower sepal navicular, with an incurred spur 8–9 mm. Upper petal ovate-orbicular, abaxial midvein conspicuously cristate; lateral united petals ± clawed; basal lobes orbicular, small; distal lobes subovate; auricle inflexed. Anthers obtuse. Ovary oblong. Capsule elliptic, narrowed at both ends, glabrous. Seeds obovoid, compressed, hairy. Fl. Aug–Sep, fr. Oct.

Mixed forests; ca. 2700 m. SE Xizang [NE India (Khasia)].


**金黄凤仙花 jin huang feng xian hua**

Plants annual, small, 6–20 cm. Stem simple or branched from base; lower part often naked, upper part puberulent. Leaves alternate, or crowded at apices of stem and branches and subverticillate, shortly petiolate in lower part of stem, subsessile in upper part; petiole ca. 1.5 cm; leaf blade gray-green abaxially, green adaxially, lanceolate, elliptic-lanceolate, or oblong-spatulate, 4.5–7 × 1.5–2 cm, membranous (membranaceous), abaxially glabrous or veins puberulent, adaxially slightly scabrid on veins, midvein conspicuously raised abaxially, lateral veins 7–9 pairs, base broadly cuneate, gradually attenuate into petiole in lower leaves, margin crenate-denticulate, teeth mucronulate, setose between teeth, apex acute or acuminate. Inflorescences 1- or 2-flowered; peduncles ca. 1/2 as long as or overtopping leaves, 2–2.5 cm, slender, puberulent. Pedicels 1–2 cm, elongate in fruit, bracteate at middle or below; bracts persistent, ovate-lanceolate, small, abaxially setose, apex acute. Flowers golden-yellow, mouth purple-brown spotted, 2–2.5 cm
deep. Lateral sepals 2, triangular-ovate, ca. 9 mm, apex acute. Lower sepal narrowly funnelform, limb navicular, ca. 2 cm deep, gradually narrowed into an involute spur 2.2–2.5 cm; mouth vertical, 6–8 mm wide, tip cupulate. Upper petal cupulate, suborbicular, 6–7 mm, abaxially puberulent, base purple-tinted; lateral united petals ± clawed, 1.1–1.2 or 1.5–1.6 cm, 2-lobed; basal lobes orbicular, small, distal lobes dolabroriform or ovate-dolabroriform, apex obtuse; auricle absent. Filaments broadly winged, ca. 3 mm; anthers obtuse. Ovary erect, elliptic, ca. 3 mm. Capsule elliptic, turgid, 1–1.5 cm, narrowed at both ends. Seeds numerous. Fl. Aug–Sep, fr. Oct.

Shaded humid places in forest understories, valleys; 1200–2800 m. NW Yunnan [NE Myanmar].

1a. Stem 10–20 cm tall; peduncles ca. 1/2 as long as leaves, inflorescences 1- or 2-flowered; lateral united petals 1.5–1.6 cm ................................. 6a. var. xanthina

1b. Stem ca. 6 cm tall; peduncles overtopping leaves, inflorescences 1-flowered; lateral united petals 1.1–1.2 cm ................................. 6b. var. pusilla

6a. Impatiens xanthina var. xanthina

金黄凤仙花 (原变种) jin huang feng xian hua (yuan bian zhong)

Stem 10–20 cm tall. Inflorescences 1- or 2-flowered; peduncles ca. 1/2 as long as leaves. Lateral united petals 1.5–1.6 cm.

Shaded humid places in forest understories, valleys; 1600–2800 m. NW Yunnan [NE Myanmar].


细小金黄凤仙花 xi xiao jin huang feng xian hua

Stem ca. 6 cm tall, very slender. Inflorescences 1-flowered; peduncles overtopping leaves. Lateral united petals 1.1–1.2 cm.

● Shaded wet stony places; 1200–1300 m. NW Yunnan.


丰满凤仙花 feng man feng xian hua

Impatiens eramosa Tutcher ex W. Y. Chun.

Plants succulent, 30–40 cm tall, glabrous. Stem erect, flat, thick, simple or rarely shortly branched from middle, naked in lower part. Leaves alternate, often crowded toward apex of stem, polymorphic; petiole 1–4 cm, with 2 sessile glands at base; leaf blade greenish abaxially, ovate or ob lanceolate, 4–15 × 2.5–3.5 cm, glabrous, lateral veins 8–15 pairs, base cuneate, attenuate into petiole, margin serrulate, apex acute or acuminate. Inflorescences in leaf axis, 1- or 2-flowered; peduncles very short, 2–3 mm. Pedicels 1–2.5 cm, slender, glabrous, bracteate at base; bracts persistent, ovate, ca. 2 mm, membranous. Flowers pink-purple, 2–3 cm deep. Lateral sepals 4; outer 2: orbicular or elliptic-orbicular, 8–15 mm in diam., apex cuspidate; inner 2: minute, ovate, ca. 2 mm. Lower sepal shallowly saccate or cup-shaped, ca. 1.5 cm deep, abruptly constricted into an incurved, short spur; mouth oblique, ca. 1.5 cm wide, tip acuminate. Upper petal broadly obovate or cuneate, 1–1.5 cm, apex retuse or truncate, mucronulate, abaxial midvein thickened, cristate; lateral united petals not clawed, 8–15 mm, 2-lobed; basal lobes spreading, pyriform; distal lobes dolabroriform, often connate into 2-lobed lamella; auricle inflexed, triangular. Filaments linear, 4–5 mm; anthers ovoid, apex obtuse. Ovary erect, fusiform. Capsule fusiform. Seeds brown, orbicular, compressed, ca. 4 mm in diam. Fl. Jun–Jul.

● Forest margins on slopes, valleys, watersides; 400–800 m. N Guangdong, Hunan, Jiangxi.

This species has very short pedunculate inflorescences, pedicels bracteate at the base, and distal lobes of lateral united petals connate or adnate into a lamella. These characters seem to indicate a group in the genus including also Impatiens hainanensis, I. morsei, I. musyana, and I. polyneura.


多脉凤仙花 duo mai feng xian hua

Plants annual, 40–70 cm tall, glabrous. Stem erect, yellow-green, often purple spotted, robust, succulent, simple, long naked in lower part. Leaves alternate, crowded at apex of stem; petiole 2.6–6 cm, purple spotted; leaf blade greenish abaxially, dark green adaxially, elliptic or oblong-elliptic, 9–18 × 5–7 cm, thickly membranous, lateral veins 16–21 pairs, base cuneate, with 2 sessile ovoid glands, margin serrulate, apex shortly acuminate. Inflorescences in upper leaf axils, 2-flowered, rarely 1-flowered; peduncles short, ca. 3 mm. Pedicels 1–1.5 cm, elongate in fruit, slender, bracteate at base; bracts persistent, triangular-ovate, small, ca. 3 mm, membranous. Flowers purplish, 1.6–2.2 cm in diam. Lateral sepals 4, purple spotted; outer 2: broadly elliptic or suborbicular, 0.9–1.2 × 0.7–0.9 cm, 9–11-veined, margin entire, apex mucronulate; inner 2: lanceolate, 2.5–4 mm. Lower sepal purple spotted, broadly funnel-form, 1.8–2.2 cm deep, narrowed into an incurved, 2-lobed spur ca. 6 mm; mouth oblique, ca. 1.7 cm wide, tip mucronulate. Upper petal obovate-oblong, 1.3–1.8 × 0.9–1.1 cm, apex retuse, abaxial midvein carinate; lateral united petals clawed, 2.2–2.8 cm, 2-lobed; basal lobes orbicular; distal lobes suborbicular, ca. 2.2 × 1 cm, apex emarginate, mucronulate. Filaments linear, ca. 1 mm; anthers ovoid, apex obtuse. Ovary fusiform, ca. 7 mm. Capsule fusiform, 2.2–2.5 cm, slightly curved, 4-angled. Seeds 7 or 8, brown, orbicular, ca. 3.8 mm, papillose. Fl. and fr. unknown.

● Streamsides in valleys; ca. 400 m. Hunan (Zixing).


越南凤仙花 yue nan feng xian hua

Plants small, 5–10 cm tall, succulent, glabrous. Stem erect, terete, simple, long naked in lower part. Leaves alternate, crowded; petiole 2–4 cm, with 2 globose glands at apex; leaf blade ovate, 9–13.5 × 3–4.5 cm, lateral veins 8–12 pairs, base cuneate, margin crenate-serrate, teeth mucronulate, apex acute
or obtuse. Peduncles absent. Pedicels 2–4 cm, not bracteate. Flowers solitary, pink-purple, yellow within, 3–5 cm wide. Lateral sepals 4; outer 2: ovate or ovate-orbicular, 1.2–1.4 × 1–1.4 cm, rigid, veins reticulate, apex cuspidate; inner 2: minute, oblong, ca. 1 mm, apex mucronulate. Lower sepal cup-shaped or deeply navicular, abruptly constricted into an erect or incurved spur; spur short, 0.8–1 cm, stout or subturgid; mouth vertical, 2–2.5 cm, tip acute. Upper petal cucullate, obovate-oblong or obcordate, 1.5–1.8 cm, apex recurved, deeply retuse, rostellate, abaxial midvein carinate below middle; lateral united petals broad; basal lobes broadly falciform-flabellate, 1.5–2.5 cm; distal lobes connate into orbicular, entire labellum 2–2.5 cm; auricle small, densely adnate. Filaments linear; anthers conic, 2–2.2 cm, 2-lobed; basal lobes suborbicular; distal lobes longer, acuminate, margin serrulate or crenulate, teeth mucronulate. Ovary slightly curved. Capsule clavate, ca. 2 cm. Seeds 5 or 6, red-brown, oblong, 3–3.5 mm, glabrous. Fl. May–Aug, fr. unknown.

Dense forests in valleys, streambeds, stony places; 800–1900 m. SE Yunnan (Funing, Wenshan) [N Vietnam].

10. Impatiens morsci J. D. Hooker, Hooker’s Icon. Pl. 29: t. 2874. 1908.

龙凤花 long zhong feng xian hua

Plants annual, 30–60(–100) cm tall, glabrous. Stem erect, purple-tinged, robust, succulent, simple or branched, long naked in lower part. Leaves alternate, crowded apically; petiole 3–5 cm, stout; leaf blade greenish abaxially, dark green adaxially, ovate, elliptic, or ovate-oblong, 8–13 × 5–7 cm, with 2 globose basal glands, glabrous, lateral veins 9–12 pairs, base cuneate or acuminate, margin serrulate or crenulate, teeth mucronulate, apex acute. Peduncles absent. Pedicels 4–5 cm, without bracts, elongate after anthesis. Flowers solitary in upper leaf axils, white, pink, or purple, inside orange spotted, 2.5–3 cm. Lateral sepals 2, green, obliquely orbicular, 0.8–1.5 cm, thick, many veined, midvein conspicuous, apex mucronulate. Lower sepal navicular or funnelform, ca. 1.2 cm deep, abruptly constricted into an incurved spur shorter than limb; mouth vertical, ca. 1.5 cm wide. Upper petal orbicular, 1–1.5 cm wide, apex deeply retuse, abaxial midvein thickened; lateral united petals clawed, 2-lobed; basal lobes falcate-flabellate; distal lobes oblong, connate into 2-lobed lamella; auricle inconspicuous, Filaments linear, flattened; anthers obtuse. Ovary fusiform. Capsule not seen. Fl. and fr. Jun–Oct.

• Dense forest understories, streambeds in valleys, shaded and humid places; 400–1000 m. Guangxi.

This species has been recently cultivated in the Guangxi Botanic Garden.


海南凤仙花 hai nan feng xian hua

Plants annual, robust, 75–125 cm tall. Stem erect, naked in lower part, simple. Leaves remote; petiole 1.5–3 cm; leaf blade ovivaceous abaxially, green adaxially, ovate or ovate-elliptic, (6–)8–13 × 4.5–7 cm, membranous, setose between teeth, lateral veins 5–7 pairs, base broadly cuneate, margin coarsely crenate-denticulate, apex acuminate or shortly acute. Inflorescences in upper leaf axils, racemes 3–9-flowered; peduncles overtopping leaves, erect or spreading, ca. 14 cm. Pedicels 1.5–2 cm, bracteate at base; bracts persistent, ovate, 5–6 × 2–3 mm, membranous, apex cuspidate. Flowers yellow or purple-tinged, ca. 4 cm deep. Lateral sepals 4; outer 2: broadly ovate, 6–8 × 3–5 mm, apex mucronulate, abaxial midvein not thickened, 3–5-veined; inner 2: lanceolate, ca. 1.2 cm, 3-veined. Lower sepal subglobose or cup-shaped, ca. 2.5 cm deep, ca. 2 cm wide, narrowed into an incurved spur ca. 8 mm; mouth vertical, ca. 2 cm wide, tip acute. Upper petal orbicular, 7–8 mm, apex emarginate, mucronulate, abaxial midvein thickened, narrowly crenate; lateral united petals not clawed, 2.5–3 cm, 2-lobed; basal lobes broadly ovate; distal lobes elliptic-lanceolate, apex obtuse; auricle broad. Filaments linear, ca. 5 mm; anthers ovoid-elliptic, apex obtuse. Ovary fusiform. Capsule linear, ca. 2 cm. Seeds many. Fl. Sep., fr. Oct.

Shaded and humid places at thicket margins, streambeds; ca. 3200 m. SE Xizang (Mêdog), NW Yunnan [Myanmar].


高黎贡山凤仙花 gao li gong shan feng xian hua

Plants annual, robust, 75–125 cm tall. Stem erect, naked in lower part, simple. Leaves remote; petiole 1.5–3 cm; leaf blade ovivaceous abaxially, green adaxially, ovate or ovate-elliptic, (6–)8–13 × 4.5–7 cm, membranous, setose between teeth, lateral veins 5–7 pairs, base broadly cuneate, margin coarsely crenate-denticulate, apex acuminate or shortly acute. Inflorescences in upper leaf axils, racemes 3–9-flowered; peduncles overtopping leaves, erect or spreading, ca. 14 cm. Pedicels 1.5–2 cm, bracteate at base; bracts persistent, ovate, 5–6 × 2–3 mm, membranous, apex cuspidate. Flowers yellow or purple-tinged, ca. 4 cm deep. Lateral sepals 4; outer 2: broadly ovate, 6–8 × 3–5 mm, apex mucronulate, abaxial midvein not thickened, 3–5-veined; inner 2: lanceolate, ca. 1.2 cm, 3-veined. Lower sepal subglobose or cup-shaped, ca. 2.5 cm deep, ca. 2 cm wide, narrowed into an incurved spur ca. 8 mm; mouth vertical, ca. 2 cm wide, tip acute. Upper petal orbicular, 7–8 mm, apex emarginate, mucronulate, abaxial midvein thickened, narrowly crenate; lateral united petals not clawed, 2.5–3 cm, 2-lobed; basal lobes broadly ovate; distal lobes elliptic-lanceolate, apex obtuse; auricle broad. Filaments linear, ca. 5 mm; anthers ovoid-elliptic, apex obtuse. Ovary fusiform. Capsule linear, ca. 2 cm. Seeds many. Fl. Sep., fr. Oct.


香港凤仙花 xiang gang feng xian hua

Plants perennial, 60–70 cm tall, glabrous. Stem erect,
sometimes prostrate, remotely branched, with adventitious roots at lower nodes. Leaves alternate; petiole 0.8–2.7 cm; leaf blade greenish abaxially, dark green adaxially, elliptic to elliptic-oblong-lanceolate, 8–18 × 2.5–5.5–7 cm, lateral veins 5–9 pairs, adaxially with 3 or 4 pairs of basal glands, base cuneate, attenuate into petiole, margin shallowly crenate, teeth mucronulate, apex acuminate or caudate-acuminate. Inflorescences in upper leaf axils, racemes lax, (3 or)4–7-flowered; peduncles ascending, shorter than leaves, 3.7–6.6 cm. Pedicels 2–3.4 mm, bracteate at base; bracts caducous, ovate-oblong, 4–7 mm, membranous, apex acute. Flowers pendulous, yellowish, mouth red-tinted, and red or reddish purple spotted, large. Laterals 4; outer 2: ovate, slightly inequilateral, 9–10 × 6–8 mm; inner 2: linear-oblong, 1.1–1.3 cm × 1.5–2.5 mm, membranous. Lower sepal saccate, 1.7–2.4 cm deep, ca. 2.8 cm wide, constricted into an incurved spur; spur linear, 1.5–2 cm. Upper petal sub-cucullate, broadly ovate or suborbicular, 1–1.3 × 1.2–1.4 cm, abaxial midvein thickened, narrowly carinate; lateral united petals clawed, 2.7–3 cm, 2-lobed; basal lobes obovate-spatulate, 1.8–2.1 × 0.9–1.2 cm; distal lobes oblong-obovate, ca. 0.9 × 0.5 cm. Filaments linear; anthers obtuse. Ovary fusiform. Capsule (immature) clavate, ca. 1.5 cm. Seeds unknown. Fl. Oct.


**Impatiens pritzelii var. hupehensis** J. D. Hooker.

Plants perennial, 20–70 cm tall, glabrous, with a procumbent tortuous subterranean stem. Stem succulent, simple, swollen at middle and lower nodes. Leaves alternate, crowded at apex of stem, sessile or shortly petiolate; leaf blade oblong-lanceolate or broadly ovate-elliptic, 5–18 × 2.5 cm, setose between teeth, lateral veins 7–9 pairs, conspicuous on both surfaces, base cuneate, decurrent into petiole, margin crenate, apex acuminate or acute. Inflorescences in upper leaf axils, racemes 3–8(–13)-flowered; peduncles overtopping or ca. as long as leaves, strict. Pedicels 2–3 cm, bracteate at base; bracts caducous, ovate or navicular, 5–8 mm, leathery, apex acuminate. Flowers yellow or yellow-white, 1.6–2.2 cm deep. Lateral sepals 4; outer 2: broadly ovate, 8–10 × 4–5 mm, inequilaterally veined, apex acuminate; inner 2: linear-lanceolate, 1–1.4 cm, hyaline, 1-veined, apex curved. Lower sepal incurved, red-brownish striate, saccate, 2.5–3.5 cm deep, gradually narrowed into an incurved or involute spur 1.4–1.7 cm; mouth vertical, 1.5–1.8 cm wide, tip acute. Upper petal broadly elliptic or obovate, 1.4–1.6 cm, membranous, apex cuspidate, abaxial midvein slightly thickened; lateral united petals broadly clawed, ca. 2 cm, 2-lobed; basal lobes obovate; distal lobes longer, oblong or subdolabriiform, apex rounded or emarginate; auricle inflexed, triangular. Filaments linear; anthers obtuse. Ovary fusiform, long rostellate. Capsule unknown. Fl. Oct.

- Humid places on slopes; 100–170 m. Guangdong (Shenzhen), Hong Kong.


**管茎凤仙花** guan jing feng xian hua

*Impatiens plebeja* Hemsley.

Plants annual, 30–40 cm tall. Stem erect, robust, succulent, simple, glabrous, swollen in lower nodes. Leaves alternate, lower leaves withering at anthesis, upper leaves often crowded; petiole 0.5–1.5 cm; stout; leaf blade gray-green abaxially, green adaxially, lanceolate or oblong-lanceolate, 6–13 × 2–3 cm, glabrous, lateral veins 7–9(–11) pairs, base cuneate, decurrent, margin crenate-denticulate, teeth mucronulate, apex acuminate or long acuminate. Inflorescences racemose, 3– or 4(or 5)-flowered; peduncles robust, strict, 2–4 cm. Pedicels 2–4 cm, bracteate at base; bracts caducous at fruiting, ovate-lanceolate, 5–7 mm, membranous. Flowers yellow. Lower lateral sepals 4; outer 2: obliquely ovate, 5–6 mm, apex acute, abaxial midvein narrowly winged; inner 2: narrowly lanceolate or linear-lanceolate, 0.9–1 cm, apex long acuminate. Lower sepal saccate, gradually narrowed into a recurved spur ca. 2 cm; mouth oblique, tip mucronulate. Upper petal obovate-elliptic, ca. 1 cm, apex rostellate, abaxial midvein green, narrowly carinate; lateral united petals shortly clawed, ca. 1.5 cm, 2-lobed; basal lobes oblong, small; distal lobes obovate; auricle absent. Filaments linear; anthers ovoid, apex obtuse. Ovary erect, fusiform. Capsule clavate, 2–2.5 cm, swollen at upper part. Seeds 3 or 4, brownish, oblong-globose, 4–5 mm, smooth. Fl. Aug.–Dec.

- Humid places along canals; 500–700 m. Fujian, N Guangdong, Hunan (Xinning), Jiangxi, Zhejiang.


**勺叶凤仙花** shao ye feng xian hua

Plants annual, 20–45 cm tall, glabrous. Stem erect, striate when dry, succulent, simple, lower nodes swollen, with many fibrous roots. Leaves crowded at upper part of stem; petiole 1.5–2 cm; leaf blade obovate, oblanceolate, spatulate, or oblong, 6–16 × 2–6 cm, membranous, setose between teeth, lateral veins 5–9 pairs, base cuneate, margin coarsely crenate, apex acute. Inflorescences in upper leaf axils, racemose, 2–4-flowered; peduncles 6–16 mm, strict. Pedicels 1.8–3 cm, slender, bracteate at base. Flowers yellow, 2.5–3.5 cm deep. Lateral sepals 4; outer 2: obliquely ovate, 6–9 × 3.5–4.5 mm, conspicuously veined, base inequilateral, apex acute; inner 2: lanceolate, 1–1.3 cm × 2.5–3 mm, apex recurved. Lower sepal saccate, 3–3.5 cm deep, gradually narrowed into an involute, short spur; mouth oblique, 1.5–2 cm, tip mucronulate. Upper petal elliptic, 1–1.2 cm × 6–8 mm, abaxial midvein thickened, narrowly carinate; lateral united petals not clawed, 1.5–2 cm, 2-lobed; basal lobes obovate; distal lobes subdolabriiform, apex emarginate; auricle inflexed, large. Filaments linear; anthers obtuse. Ovary fusiform, 3.5–4.5 mm. Capsule unknown. Fl. Oct.

- Humid places by waterfalls; ca. 400 m. Guizhou (Chishui).


**管茎凤仙花** guan jing feng xian hua

*Impatiens plebeja* Hemsley.

Plants annual, 30–40 cm tall. Stem erect, robust, succulent, simple, glabrous, swollen in lower nodes. Leaves alternate, lower leaves withering at anthesis, upper leaves often crowded; petiole 0.5–1.5 cm; stout; leaf blade gray-green abaxially, green adaxially, lanceolate or oblong-lanceolate, 6–13 × 2–3 cm, glabrous, lateral veins 7–9(–11) pairs, base cuneate, decurrent, margin crenate-denticulate, teeth mucronulate, apex acuminate or long acuminate. Inflorescences racemose, 3– or 4(or 5)-flowered; peduncles robust, strict, 2–4 cm. Pedicels 2–4 cm, bracteate at base; bracts caducous at fruiting, ovate-lanceolate, 5–7 mm, membranous. Flowers yellow. Lower lateral sepals 4; outer 2: obliquely ovate, 5–6 mm, apex acute, abaxial midvein narrowly winged; inner 2: narrowly lanceolate or linear-lanceolate, 0.9–1 cm, apex long acuminate. Lower sepal saccate, gradually narrowed into a recurved spur ca. 2 cm; mouth oblique, tip mucronulate. Upper petal obovate-elliptic, ca. 1 cm, apex rostellate, abaxial midvein green, narrowly carinate; lateral united petals shortly clawed, ca. 1.5 cm, 2-lobed; basal lobes oblong, small; distal lobes obovate; auricle absent. Filaments linear; anthers ovoid, apex obtuse. Ovary erect, fusiform. Capsule clavate, 2–2.5 cm, swollen at upper part. Seeds 3 or 4, brownish, oblong-globose, 4–5 mm, smooth. Fl. Aug.–Dec.

- Forest under stories, shaded and humid places along canals; 500–700 m. Fujian, N Guangdong, Hunan (Xinning), Jiangxi, Zhejiang.

The roots and stem are used medicinally to improve circulation, reduce swelling, stop bleeding, alleviate pain, and treat injuries, trauma, and dysentery.


Plants 30–60 cm tall, with a long rhizome. Stem erect, robust, simple. Leaves alternate, crowded at upper part of stem; leaf blade oblong-ovate or oblong-oblanceolate, 10–22 × 4–8 cm, setose between teeth, lateral veins 9 or 10 pairs, base cuneate, margin repand-crenate, apex acuminate. Inflorescences axillary, racemose, 4–10-flowered; peduncles 7–15 cm. Pedicels ca. 2 cm. Flowers yellow, large, to 5 cm. Lateral sepals 4; outer 2: obliquely ovate; inner 2: linear-lanceolate. Lower sepal saccate, abruptly elongated into a slightly curved or involute spur; spur long, 2–3 cm. Upper petal elliptic, apex rounded, mucronulate, abaxial midvein fine; lateral united petals not clawed, 2-lobed; basal lobes oblong, apex acuminate; distal lobes narrowly oblong, apex rounded-obtuse; abaxial auricle broad. Anthers obtuse. Ovary unknown. Capsule clavate. Fl. and fr. Jun–Nov.

- Forest understories, grasslands on slopes, shaded moist places; 900–1500 m. Guangdong, Guangxi, Guizhou, S Yunnan.

The whole plant is used medicinally for treating irregular menstruation, injuries, and trauma.

Plants 30–60 cm tall, glabrous. Stem erect or sometimes ascending at base, succulent, long nacked on lower part, lower nodes swollen. Leaves alternate, often crowded at upper part of stem; petiole 1–2 cm; leaf blade often becoming purple abaxially, dark green adaxially, oblong-lanceolate or lanceolate, 8–15(–21) × 2–4 cm, membranous, setose between teeth, lateral veins 7–9(–11) pairs, base cuneate, attenuate into petiole, margin coarsely crenate, apex acuminate. Inflorescences in upper leaf axils, 3–8(–11)-flowered; peduncles ca. as long as or longer than leaves, strict. Pedicels 1.5–2 cm, elongate in fruit, slender, bracteate at base; bracts caducous, ovate or navicular, 6–8 × ca. 3 mm, apex acuminate. Flowers spreading, pink, 4–4.5 cm deep, inequilateral. Lateral sepals 4; outer 2: saccate, apex incurved, mucronulate, abaxial midvein thickened, narrowly carinate; inner 2: linear, 1.1–1.2 cm × 2.5–3 mm, 1-veined, hyaline, apex curved, mucronulate. Lower sepal red spotted, broadly funneliform, 3–3.5 cm deep, gradually narrowed into an incurved spur 1.5–2 cm; mouth oblique, 1.8–2 cm, tip acute. Upper petal elliptic-obovate or suborbicular, 1.2–1.3 cm, apex emarginate, abaxial midvein conspicuously thickened, carinate; lateral united petals ± clawed, ca. 2 cm; basal lobes red spotted, obovate; distal lobes longer, oblong-dolabril-form; auricle inflexed, subovate. Filaments linear, ca. 4 mm; anthers ovoid, apex obtuse. Ovary fusiform, 5–6 mm. Capsule clavate, 2–2.5 cm, (2 or)3- or 4-seeded. Seeds dark brown, oblong, ca. 2.5 mm, smooth. Fl. Jun–Sep.

- Forest understories, shaded moist places; 700–1100 m. Guizhou, Yunnan (Guangnan).


- Forest understories, grasslands on slopes, shaded moist places; 900–1500 m. Guangdong, Guangxi, Guizhou, S Yunnan.

The whole plant is used medicinally for treating irregular menstruation, injuries, and trauma.


- Forest understories, grasslands on slopes, shaded moist places; 900–1500 m. Guangdong, Guangxi, Guizhou, S Yunnan.

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- Forest understories, grasslands on slopes, shaded moist places; 900–1500 m. Guangdong, Guangxi, Guizhou, S Yunnan.

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- Forest understories, grasslands on slopes, shaded moist places; 900–1500 m. Guangdong, Guangxi, Guizhou, S Yunnan.

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- Forest understories, grasslands on slopes, shaded moist places; 900–1500 m. Guangdong, Guangxi, Guizhou, S Yunnan.

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- Forest understories, grasslands on slopes, shaded moist places; 900–1500 m. Guangdong, Guangxi, Guizhou, S Yunnan.

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- Forest understories, grasslands on slopes, shaded moist places; 900–1500 m. Guangdong, Guangxi, Guizhou, S Yunnan.

The whole plant is used medicinally for treating irregular menstruation, injuries, and trauma.


Plants ca. 45 cm tall. Leaves alternate, crowded at upper part of stem, petiolate or nearly sessile in upper leaves; petiole 3.5–5 cm; leaf blade elliptic, 9–12 × 3.5–4 cm, both surfaces nearly glabrous, base attenuate into petiole, margin crenate, apex acute to acuminate. Inflorescences in upper leaf axils, pendulous beneath subtending leaf, racemose, usually with 2 flowers and few aggregated small flower buds; peduncles ca. 1.5 cm, glabrous. Pedicels ca. 1.5 cm, glabrous, bracteate at base; bracts not caducous, ovate, 5–7 mm, apex acute. Flowers pale yellow, large, ca. 2 cm, ca. 4 cm deep. Lateral sepals 4; outer 2: obliquely broadly ovate, ca. 1.5 × 1.2 cm, apex acute; inner 2: longer, linear, ca. 1.8 cm, apex acuminate. Lower sepal pale yellow, with reddish veins, saccate, ca. 2.4 cm, ca. 1.7 cm deep excluding spur, abruptly narrowed into an incurved spur ca. 8 mm (ca. 2 cm overall); mouth oblique. Upper petal pale yellow, with reddish veins, broadly obovate, ca. 1.6 × 2 cm, apex slightly retuse, mucronulate, abaxial midvein thickened, carinate; lateral united petals pale yellow, with reddish veins, ca. 2.8 cm, 2-lobed; basal lobes narrowly obovate, ca. 1.8 × 0.7 cm, apex acute; distal lobes obovate, ca. 1.3 × 1 cm, apex retuse; auricle inflexed, rounded. Anthers ovoid, apex acute, connate glabrous. Fl. Oct. 2n = 36*.

● Forests, moist places; 1700–1900 m. SW Yunnan.


Plants ca. 30 cm tall. Leaves alternate, crowded at upper part of stem, petiolate or nearly sessile in upper leaves; petiole 1–2.5 cm; leaf blade elliptic, 7–9 × 2.5–3.5 cm, both surfaces nearly glabrous, base attenuate into petiole, margin crenate, apex acute. Inflorescences in upper leaf axils, pendulous beneath subtending leaf, racemose,1-flowered or aggregately 2-flowered; peduncles ca. 2–5 cm, glabrous. Pedicels ca. 1 cm, glabrous, bracteate at base; bracts not caducous, ovate, ca. 5 mm, apex acute. Flowers pale greenish yellow, large, ca. 3 cm, ca. 4 cm deep. Lateral sepals 4; outer 2: obliquely ovate, ca. 7 × 5 mm, apex acute; inner 2: longer, linear, ca. 1.4 cm, apex acuminate. Lower sepal pale greenish yellow, saccate, ca. 1.9 cm, ca. 2.5 cm deep excluding spur, abruptly narrowed into an incurved spur ca. 4 mm; mouth oblique. Upper petal pale greenish yellow, nearly orbicular, ca. 1.7 × 1.9 cm, apex rounded, abaxial midvein thickened, crista above middle, crista ca. 5 mm high; lateral united petals pale greenish yellow, ca. 2.6 cm, 2-lobed; basal lobes oblong-obovate, ca. 1.6 × 0.8 cm, apex rounded; distal lobes oblong-obovate, ca. 1.7 × 0.8 cm, apex slightly retuse; auricle inflexed, rounded. Anthers ovoid, apex acute, connate glabrous. Fl. Aug. 2n = 36*.

● Forests, moist places; 1700–1900 m. SW Yunnan.


Plants erect, 30–50 cm tall, with robust rhizome, simple, nodes turgid. Leaves alternate, often crowded at upper part of stem; petiole 4–6 cm; leaf blade lanceolate or ovate-oblong, 8–16 × 4–5 cm, setose between teeth, lateral veins 5–7 pairs, base cuneate, margin coarsely crenate, apex acuminate. Inflorescences terminal, racemose, 5–8-flowered; peduncles 4–10 cm. Pedicels ca. 2 cm, slender, bracteate at base; bract ovate-oblong. Flowers yellow, large. Lateral sepals 4; outer 2: obliquely ovate; inner 2: falcate. Lower sepal narrowly funnelform, narrowed into an involute, short spur. Upper petal triangular-orbicular, apex rounded, cuspidate, abaxial midvein slightly thickened; lateral united petals not clawed, 2-lobed; basal lobes subtetragonous; distal lobes dolabriform, longer, apex rounded; abaxial auricle broad. Anthers obtuse. Ovary fusiform. Capsule unknown. Fl. Aug.–Sep.

● Understories of thickets and forests, forest margins; 900–1000 m. Sichuan.

Plants annual, 40–60 cm tall. Stem erect, robust, fleshy, branched in upper part. Leaves alternate; petiole 5–12 cm, brown pilose; leaf blade gray-green abaxially, dark green adaxially, ovate-oblong or elliptic, 12–15 × 5–6.5 cm, rigidly papery, puberulent on veins, lateral veins 9–12 pairs, base attenuate into petiole, with 1 or 2 pairs of stipitate globose glands, margin serrulate, apex acuminate. Inflorescences at apex of stem or in upper leaf axils, racemose, many flowered; peduncles erect, longer than petioles, 5–12 cm. Pedicels 1.3–2 cm, bracteate at base; bracts caducous, ovate-lanceolate, ca. as long as pedicels, herbageous. Flowers yellow, large, 4–5 cm deep. Lateral sepals 4; outer 2: subovate, 1.5–2 cm × 5–6 mm, apex acuminate, abaxial midvein not thickened; inner 2: linear-oblong, ca. 15 × 3–4 mm, apex mucronulate. Lower sepals saccate-funnelform, 3–3.5 cm deep, narrowed into an incurved spur ca. 1/2 as long as limb; mouth oblique, tip acuminate, 2–2.5 cm wide. Upper petal elliptic or obovate, ca. 1.2 cm, apex mucronulate; lateral united petals ± clawed, ca. 2.5 cm, 2-lobed; basal lobes obovate-cuneate; distal lobes curved, ± clawed, dolabriform, longer, auricle absent. Filaments fibrous, ca. 5 mm; anthers ovoid, apex obtuse. Ovary fusiform. Capsule not seen. Fl. Oct.

Sparse forests, by streams, shaded moist places; 1000–1400 m. S Yunnan [N Vietnam].

Plants annual, 40–60 cm tall. Stem erect, robust, fleshy, branched in upper part. Leaves alternate; petiole 5–12 cm, brown pilose; leaf blade gray-green abaxially, dark green adaxially, ovate-oblong or elliptic, 12–15 × 5–6.5 cm, rigidly papery, puberulent on veins, lateral veins 9–12 pairs, base attenuate into petiole, with 1 or 2 pairs of stipitate globose glands, margin serrulate, apex acuminate. Inflorescences at apex of stem or in upper leaf axils, racemose, many flowered; peduncles erect, longer than petioles, 5–12 cm. Pedicels 1.3–2 cm, bracteate at base; bracts caducous, ovate-lanceolate, ca. as long as pedicels, herbageous. Flowers yellow, large, 4–5 cm deep. Lateral sepals 4; outer 2: subovate, 1.5–2 cm × 5–6 mm, apex acuminate, abaxial midvein not thickened; inner 2: linear-oblong, ca. 15 × 3–4 mm, apex mucronulate. Lower sepals saccate-funnelform, 3–3.5 cm deep, narrowed into an incurved spur ca. 1/2 as long as limb; mouth oblique, tip acuminate, 2–2.5 cm wide. Upper petal elliptic or obovate, ca. 1.2 cm, apex mucronulate; lateral united petals ± clawed, ca. 2.5 cm, 2-lobed; basal lobes obovate-cuneate; distal lobes curved, ± clawed, dolabriform, longer, auricle absent. Filaments fibrous, ca. 5 mm; anthers ovoid, apex obtuse. Ovary fusiform. Capsule not seen. Fl. Oct.

Sparse forests, by streams, shaded moist places; 1000–1400 m. S Yunnan [N Vietnam].
long cuneate, margin remote; petiole 0.5–2 cm; leaf blade greenish abaxially, dark green adaxially, ovate or ovate-elliptic, 6–10 × 3–6(–8) cm, thinly papery, abaxially glabrous, adaxially sparsely strigose, lateral veins 7–9 pairs, curved, base broadly cuneate or subrounded, margin coarsely serrate, apex acuminate. Inflorescences of terminal leaf axils, racemose, 3–5-flowered; peduncles shorter than leaves, 5–8–10 cm. Pedicels 0.5–1 cm, elongate after anthesis, slender, bracteate at base; bracts persistent, broadly ovate, ca. 3 × 1–1.5 mm, fleshy, apex mucronulate. Flowers yellow, 2.5–3 cm deep. Lateral sepals 2, oval or ovate, 7–10 mm, thick, many veined, apex mucronulate. Lower sepal saccate, ca. 3 cm deep, narrowed into an incurved spur 1–1.5 cm, tip acute. Upper petal orbicular, ca. 1.5 cm in diam., abaxial midvein thickened, with horn-shaped crista at middle; lateral united petals not clawed, ca. 2.5 cm, 2-lobed; basal lobes ovate, ca. 0.5–1 cm wide; distal lobes broadly ovate, longer, apex obtuse. Filaments linear, 4–5 mm; anthers acute. Ovary linear. Capsule not seen. Fl. Jul.–Aug.


**湖南凤仙花** hua nan feng xian hua

Plants annual, 30–60 cm tall. Stem erect, striate when dry, succulent, simple or branched, lower nodes turged, with many fibrous roots, sparsely pilose in upper part. Leaves alternate; petiole 2.5–4 cm, slender; leaf blade greenish abaxially, green adaxially, ovate or ovate-lanceolate, 5–13 × 2.5–5 cm, membranous, abaxially pilose on veins, adaxially sparsely strigose, setose between teeth, midvein prominent, sparsely puberulent, lateral veins 5 or 6 pairs, curved, base attenuate into petiole, margin coarsely crenate or crenate-serrate, apex acuminate or shortly caudate. Inflorescences in upper leaf axils, racemose, laxly 3–4-flowered; peduncles conspicuously shorter than leaves, 5–8 cm; leaf blade greenish abaxially, dark green adaxially, ovate or ovate-lanceolate, 6–9 × 3–4.5 cm, papery, abaxial midvein sparsely pilose or glabrate, adaxially strigose, lateral veins 5–7 pairs, curved, base broadly cuneate, attenuate into petiole, margin crenate-serrate, teeth glandular-mucronulate, apex acuminate. Inflorescences of terminal leaf axils, 3–5-flowered; peduncles erect or ascending, shorter than leaves, 3–5 cm. Pedicels 1–2 cm, bracteate at base; bracts persistent, green, broadly ovate, ca. 3 mm, thick, apex cuspidate. Flowers yellowish, purplish striate, 2.5–3 cm deep. Lateral sepals 2, orbicular, 0.8–1 cm in diam., membranous, reticulate veined, apex glandular-mucronulate. Lower sepal broadly saccate, ca. 2 cm deep, abruptly constricted into an incurved spur 4–5 mm; mouth oblique, ca. 1.4 cm, tip acute. Upper petal suborbicular, ca. 1.5 cm in diam., abaxial midvein thickened, with horn-shaped crista at middle; lateral united petals not clawed, ca. 2.5 cm, 2-lobed; basal lobes suborbicular, ca. 1 cm wide; distal lobes broadly ovate, longer, apex obtuse. Filaments linear, 4–5 mm; anthers acute. Ovary linear. Capsule not seen. Fl. Jul.–Aug.
at base; bracts persistent, conchiform or arcuate, ca. 3 mm, apex mucronulate. Flowers yellow, ca. 3.5 cm deep, ca. 2 cm in diam. Lateral sepals 2, brown when dry, orbicular, 6–8 mm in diam. Lower sepal deeply saccate, constricted into a curved, short spur, mouth oblique, acute. Upper petal suborbicular, 1–1.2 cm wide, abaxial midvein rostellate at middle; lateral united petals clawed, ca. 2.7 cm, 2-lobed; basal lobes orbicular, ca. 9 mm wide; distal lobes broadly dolabridiform, large; auricle inflexed, suborbicular. Filaments flattened, ca. 5 mm; anthers ovoid, apex acute. Ovary erect, clavate. Capsule clavate, 2–2.5 cm, 3–5-seeded. Seeds brown-black, suborbicular, ca. 2 mm in diam. Fl. and fr. Aug–Sept.

- Forest understories, shaded moist places; 1800–2800 m. Si-chuan (Emei Shan).

This species is closely related to Impatiens duclouxii but differs in having inflorescences 1–3-flowered, lateral sepals smaller, and leaves abaxially hairy.


长角凤仙花 chang jiao feng xian hua

Plants annual, 40–60 cm tall, glabrous. Stem erect, robust, succulent, simple, lower nodes swollen, with many fibrous roots. Leaves alternate; petiole 1–2 cm; leaf blade gray-green abaxially, dark green adaxially, ovate or ovate-elliptic, 5–13 × 3–5.5 cm, membranous, abaxially glabrous, adaxially sparsely strigose, lateral veins 5–7 pairs, curved, base broadly cuneate, margin crenate-serrate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, racemose, large, 2–3 mm, apex mucronulate. Flowers spreading, yellow, 3.5–4 cm in diam. Lateral sepals 2, obliquely ovate or suborbicular, 3–3.5 mm, 3–5-veined, base inequilateral, apex mucronulate. Lower sepal deeply saccate, 3.2–3.5 cm deep, abruptly constricted into an incurred spur ca. 1 cm; mouth oblique, 2–2.2 cm, tip acuminate. Upper petal cucullate, elliptic-orbicular, ca. 2.2 × 1.4–1.5 cm, abaxial midvein conspicuously thickened, cristate, cripta apically with a long cornu (horn) ca. 1 cm; lateral united petals clawed, 2.8–3 cm, 2-lobed; basal lobes broadly ovate, apex acute; distal lobes dolabridiform; auricle inflexed, orbicular. Filaments linear, ca. 9 mm, apex swollen; anthers ovoid, apex acute. Ovary erect, fusiform, ca. 7 mm. Capsule (immature) clavate, 1.8–2 cm, rostellate. Fl. Oct.

- By streams in valleys. Hunan (Dong’an).

31. Impatiens rubrostriata J. D. Hooker, Hooker’s Icon. Pl. 30: t. 2954. 1911 [“rubro-striata”].

红纹凤仙花 hong wen feng xian hua

Plants annual, 30–90 cm tall. Stem erect, succulent, smooth, branched. Leaves alternate; petiole 2–4 cm; leaf blade ovate, elliptic, or oblong, 5–10 × 3–6 cm, basal margin with few glands, lateral veins 5–8 pairs, base narrowly cuneate, margin coarsely crenate-serrate, apex caudate-acuminate. Inflorescences axillary, racemose, 3–5-flowered; peduncles short, 2–3 cm, slender. Pedicels 1–1.5 cm, slender, bracteate at base; bracts lanceolate, small, 1–2 mm, herbaceous. Flowers white, red striate, large, 4–5 cm deep. Lower sepal saccate, base narrowed into an incurved, short spur. Upper petal orbicular, abaxial midvein carinate; lateral united petals 1–1.4 cm, stipitate, 2-lobed; distal lobes dolabridiform, large, apex obtusely rounded; basal lobes elliptic, apex obtuse; auricle inflexed, suborbicular. Anthers obtuse or ?acute. Capsule fusiform. Seeds orbicular, smooth. Fl. Jun–Jul, fr. Jul–Sep. 2n = 40*.

- Understories of sparse forests, thickets, by streams in valleys, grasslands, humid moist places; 1700–2600 m. Guangxi, Guizhou, Yunnan.

32. Impatiens cyathiflora J. D. Hooker, Hooker’s Icon. Pl. 30: t. 2952. 1911.

金凤花 jin feng hua

Plants annual, 60–70 cm tall, with few supporting roots. Stem erect, robust, branched or simple, lower part glabrous, upper part and nodes yellow-brown glandular hairy. Leaves alternate; petiole 1–2 cm, slender, with 1 pair of globose basal glands; leaf blade greenish abaxially, dark green adaxially, ovate-oblong or ovate-lanceolate, 10–13 × 3.5–4.5 cm, submembranous, glabrous, basally with few pairs of stipitate glands or glandular hairs, marginal teeth apically setose, lateral veins 3–5 pairs, curved, base cuneate, attenuate into petiole, margin crenate-serrate, apex acuminate or caudate-acuminate. Inflorescences terminal and in upper leaf axils, racemose, 6–10-flowered; peduncles shorter than or overtopping leaves, 6–8–(10) cm. Pedicels 1.1–1.5 cm, slender, bracteate at base; bracts persistent, ovate-lanceolate, 3–4 mm, membranous, apically glandular, long acuminate. Flowers yellow, red spotted, 3.5–3.7 cm deep. Lateral sepals 2, obliquely ovate or subtetrangular, 3–4 × 2–3 mm, thick, many veined, apex long glandular. Lower sepal cup-shaped or funnelform, 1.5–1.8 cm deep, narrowed into an incurred spur ca. as long as or longer than limb; mouth vertical, obtuse. Upper petal saccate, orbicular, ca. 1 cm in diam., apex obtuse, abaxial midvein slightly thickened, lateral united petals clawed, 2–2.5 cm, narrow, 2-lobed; basal lobes oblong-orbicular; distal lobes rotate, apex obtuse; auricle inflexed, small. Filaments linear; anthers ovoid, apex obtuse. Ovary erect, linear. Capsule clavate, 2–2.7 cm. Seeds many, brown, oblong or obovoid, ca. 3 mm, tuberculate. Fl. Aug–Sep, fr. Oct–Nov.

Understories of mixed forests, moist places on slopes, grasslands; 1900–2300 m. Yunnan.


棒尾凤仙花 bang wei feng xian hua

Plants annual, 30–60 cm tall. Stem robust, with many adventitious roots, sparsely slender branched, naked in lower part, sulcate when dry, glabrous, with few glands in upper part. Leaves alternate; petiole 1–2 cm, with 1 pair of globose glands; leaf blade greenish abaxially, dark green adaxially, ovate-lanceolate or lanceolate, 7–12 × 2–3.5 cm, thinly papery, both surfaces glabrous, setose between teeth, lateral veins 6–8 pairs, inconspicuous, base broadly cuneate, margin crenate-serrate, apex acuminate. Inflorescences erect, in upper leaf axils, racemose,
33a. *Impatiens clavicuspis* var. *clavicuspis*  

**棒尾凤仙花（原变种）** bang wei feng xian hua (yuàn biān zhòng)  

Bracts and lateral sepals apically long glandular arista.  

- Shaded moist places in valleys; 2400–2800 m. Yunnan [?Myanmar].

1a. Bracts and lateral sepals apically long glandular arista  

1b. Bracts and lateral sepals apically shortly acuminate  

33a. *Impatiens clavicuspis* var. *clavicuspis*  

33b. *Impatiens clavicuspis* var. *brevicuspis*  

**短尖棒尾凤仙花** duān jiān bang wei feng xian hua  

Bracts and lateral sepals apically shortly acuminate.  

- Shaded moist places in valleys; 2600–2700 m. Yunnan [?Myanmar].

33b. *Impatiens clavicuspis* var. *brevicuspis*  

**盾萼凤仙花** dūn é fēng xiān huā  

Plants annual, 50–100 cm tall, with many supporting roots, glabrous. Stem erect, robust, naked in lower part, branched in upper part; branches sulcate when dry. Leaves alternate, appearing subverticillate, often crowded at upper parts of stem and branches, petiolar, uppermost leaves sessile or subsessile; petiole absent or 6–7 cm; leaf blade gray-green abaxially, dark green adaxially, ovate-lanceolate, rarely ovate-elliptic; 8–10 × 3.5–7 cm, rigid, often with 1 pair of sessile globose basal glands, setose between teeth, lateral veins (7 or)8–10 pairs, curved, midvein conspicuous, base broadly cuneate, gradually attenuate into petiole, margin densely coarsely crenate, apex acuminate or caudate-acuminate. Inflorescences terminal or axillary, racemose, 8–13(–16)-flowered; peduncles overtopping or ca. as long as leaves, 8–16(–20) cm. Pedicels 1.5–2 cm, bracteate at base; bracts caducous, broadly ovate or ovate-lanceolate, 3–4 mm, membranous, apex scarcely mucronulate or cuspidate. Flowers yellow, upper petal and lateral united petals pink-purple spotted, 2–2.5 cm deep. Lower sepals 2, yellow-green, obliquely orbicular or suborbicular, 7–8 mm in diam., ± leathery, many veined, midvein absent, apex hardly mucronulate. Lower sepal saccate, 2–2.5 cm, gradually narrowed into an incurved spur 1.5–1.8 cm; mouth subvertical, 8–10 mm wide, tip mucronulate. Upper petal deeply saccate, suborbicular, 8–10 mm in diam., abaxially rounded carinate, apex obtuse; lateral united petals not clawed, base broadly cuneate, 2–2.5 cm, 2-lobed; basal lobes orbicular, small; distal lobes dolabraliform, ca. 2 × as large as basal lobes, apex obtuse-rounded; auricle narrow. Filaments short, ca. 4 mm; anthers ovoid, apex obtuse. Ovary fusiform. Capsule linear, 3–3.5 cm. Seeds many, brown, obovoid-oblong, ca. 4 mm, tuberculate. Fl. Aug–Sep.  

- Mixed forests on slopes, alpine grassy slopes, by streams; 1800–3800 m. NW Yunnan.

This species differs from *Impatiens loulanensis* in having sepals yellow-green, obliquely orbicular or suborbicular, rigidly leathery when dry, abaxially striate; upper petal and basal lobes pink-purple spotted; and bracts caducous, broadly ovate, scarcely mucronulate.

36. *Impatiens cyanantha* J. D. Hooker, Hooker’s Icon. Pl. 29: t. 2866. 1908.  

Forest understories, moist places in valleys, grasslands, along canals; 700–2500 m. Guizhou, Yunnan.

The whole plant is used medicinally for relaxing and activating the tendons and for treating injuries, trauma, and snakebites.

This species is closely related to *Impatiens pinetorum* J. D. Hooker ex W. W. Smith, which was (?)erroneously) recorded from W Yunnan (Tengchong) in FRPS (47(2): 60–61. 2001). According to the protologue and a photograph of the type specimen, the bracts of that species are ovate, small, glandular arista, and the lateral sepals apically shortly arista. It seems to be similar to *I. loulanensis* but differs in having flowers smaller, ca. 2 cm, yellowish, red spotted, and lower sepal funnelform with a slender, erect spur longer than limb.
Plants annual, 20–70 cm tall. Stem erect, robust, branched. Leaves alternate; petiole 1–3 cm; leaf blade elliptic or lanceolate, 5–10 × 2–4 cm, base with 2 glands shortly clawed or sessile, setose between teeth, lateral veins 5 or 6 pairs, base cuneate, margin coarsely crenate-serrate, apex acuminate or caudate. Pedicels ca. 1 cm, slender, bracts caducous, small. Flowers blue or purple-blue, large, 2–5 cm deep. Upper petals broadly obovate, ca. 8 × 6–7 mm, base subcordate, apex mucronulate. Filaments linear, 2–2.5 cm, slender, bracteate at base; bracts persistent, broadly ovate or orbicular, 3–5 × 2–3 mm, membranous, hyaline, apex mucronulate. Flowers purple, 3.5–5 cm deep. Lower petals ca. 1.5 cm deep, gradually narrowed into a mid-curved spur ca. 1.2 cm; mouth oblique, ca. 3 mm, mucronulate. Ovary fusiform, 2.5–3 cm. Seeds many (ca. 15), brown, oblong, 3–4 mm, smooth. Fl. Aug–Sep, fr. Oct.

- Forest understories, by streams in valleys; 2400–3300 m. NW Yunnan.


Plants annual, 50–90 cm tall, glabrous or subglabrous, base and lower part with few supporting roots. Stem erect, strong, robust. Leaves alternate, crowded at upper part, subverticillate, upper leaves subsessile, lower leaves shortly petiolate; petiole shortly winged; leaf blade greenish axially, dark green adaxially, ovate or oblong, 9–15(–24) × 4–7 cm, membranous, setose between teeth, lateral veins 7–10(–13) pairs, obliquely curved, adaxially papillose-seabrid, base with scutiform or digitate glands, narrowly cuneate, gradually attenuate into petiole, margin densely crenate, apex long acuminate. Inflorescences in upper leaf axils, racemose, densely 8–12-flowered; peduncles shorter than or ca. as long as leaves, 6–8 cm. Pedicels 1–2 cm, slender, bracteate at base; bracts caducous, ovate, very small, apex acuminate. Flowers pale pink, yellow at throat, ca. 3 cm deep. Lower sepals 2, ovate, broadly ovate or orbicular, 7–8 mm, 5-veined, base oblique or subrounded, apex mucronulate. Lower sepal beak not clawed, 2–2.2 cm, 2-lobed; basal lobes orbicular, base cuneate; distal lobes dolabridiform, ca. as long as basal lobes, apex obtuse. Filaments linear, short; anthers obtuse. Capsule fusiform, 2.5–3 cm. Seeds few, globose, ca. 3 mm. Fl. Aug–Sep, fr. Oct.

- Mixed forests, forest margins, thickets along canals; 2000–2600 m. NW Yunnan.


Plants annual, 40–70 cm tall, glabrous or sparsely stipitate glandular, with short, supporting roots. Stem erect, robust, simple or many branched. Leaves alternate, or crowded at upper parts of stems and branches and subverticillate, lower leaves long petiolate, upper leaves subsessile; leaf blade elliptic or lanceolate-lanceolate, 5–15 × 3.5–4.5 cm, membranous, setose between teeth, lateral veins 6–9 pairs, curved, with stipitate glands, base cuneate, margin densely crenate, apex caudate-acuminate. Inflorescences in upper leaf axils, racemose, 4–6(–8)-flowered; peduncles shorter than leaves, 4–8 cm. Pedicels 1–2.5 cm, slender, bracteate at base; bracts persistent, broadly ovate or orbicular, 3–5 × 2–3 mm, membranous, hyaline, apex mucronulate. Flowers purple, 3.5–5 cm deep. Lower petals 2, broadly ovate, 4–5 mm, base subcordate, apex mucronulate. Lower sepal obliquely funnelform, limb ca. 1.5 cm deep, gradually narrowed into a mid-curved spur ca. 1.2 cm; mouth oblique, ca. 3 mm, mucronulate. Upper petal cucullate, orbicular, 8–9 mm, apex mucronulate, abaxial midvein thickened, crenate; lateral united petals not clawed, ca. 2 cm, 2-lobed; basal lobes obovate; distal lobes lanceolate, ca. as long as basal lobes. Filaments ligulate; anthers orbicular, apex obtuse. Ovary fusiform. Capsule linear-cylindric, 2.5–3 cm. Seeds many (ca. 15), brown, oblong, 3–4 mm, smooth. Fl. Aug–Sep, fr. Oct.

- Forest under stories, by streams in valleys; 2400–3300 m. NW Yunnan.
Plants annual, 30–40 cm tall, glabrous. Stem slender, flexuose. Leaves alternate; petiole 2–3 cm; leaf blade purple-brown abaxially, green adaxially, ovate or ovate-lanceolate, 5–10 × 2.5–3 cm, setose between marginal teeth, lateral veins 7–10 pairs, base attenuate into petiole, margin crenate or serrulate, apex acuminate. Inflorescences in middle or upper leaf axils, spreading, many flowered; peduncles 5–6 cm, stout. Pedicels fibrous, 1–1.5 cm, bracteate at base; bracts caducous, oblong-lanceolate, 3–5 mm. Flowers yellow, ca. 2 cm deep. Lateral sepals 2, oblong or oblong-oblong, 2–3 mm, midvein thick, apex obtuse. Lower sepals narrowly cornute, ca. 2 cm deep, gradually narrowed into a subreflexed, stout spur; mouth oblique, tip acute. Upper petal obovate-oblong, ca. 1.8 cm, 2-lobed; basal lobes oblong, apex obtuse; distal lobes linear, longer, apex obtuse; auricle inflexed. Filaments linear; anthers obtuse. Ovary curved. Capsule not seen. Fl. Aug.

- NE Yunnan.


黄金凤 huang jin feng

Plants annual, 30–60 cm tall. Stem slender, simple or few branched. Leaves alternate, usually crowded at upper part of stem, upper leaves subsessile, lower leaves with petiole 1.5–3 cm; leaf blade ovate-lanceolate or elliptic-lanceolate, 5–13 × 2.5–5 cm, setose between teeth, lateral veins 5–11 pairs, base cuneate, margin crenate or coarsely crenate, apex acute or acuminate. Inflorescences in upper leaf axils, racemose, 5–8-flowered. Pedicels slender or stout, bracteate at base; bracts persistent, lanceolate. Flowers yellow or purple, ca. 3 cm deep. Lateral sepals 2, narrowly oblong, ca. 5 mm, membranous, slightly thickening on 1 side, 3–5-veined, apex cuspitate. Lower sepal narrowly funnelform; mouth mucronulate; spur ca. as long as limb. Upper petal orbicular.

- Bamboo forests, mixed forests; ca. 2600 m. NW Yunnan (Dali, Weixi).


长距凤仙花 chang ju feng xian hua

Plants annual, 50–80 cm tall, glabrous. Stem erect, robust, long naked in lower part, branched or simple, with few supporting roots. Leaves alternate; petiole winged; leaf blade green abaxially, sometimes turning purple when dry, green adaxially, oblong-ovate or oblong-lanceolate, 8–15 × 2.5–4.5 cm, membranous, both surfaces glabrous, setose between teeth, lateral veins 6–8 pairs, curved, base cuneate, attenuate into petiole, margin crenate, apex acuminate or caudate-acuminate. Inflorescences in upper leaf axils, racemose, 5–7-flowered; pedicels longer than petals, 8–12 cm. Pedicels 1.5–2.5 cm, slender, bracteate at base; bracts persistent, green, ovate or ovate-lanceolate, 5–7 × 2–3 mm, hyaline margined, apex rounded. Flowers yellow, purple spotted, 2.5–3 cm deep. Lateral sepals 2, ovate, 4–5 × ca. 2 mm, apex mucronulate or apiculate. Lower sepals purple-red spotted, navicular, gradually narrowed into an incurved spur; spur long, ca. 1.5 cm, slender; mouth abruptly curved, tip acuminate. Upper petal navicular, shorter than lower sepal, apiculate, abaxial midvein thickened, cristate; lateral united petals spotted, longer than upper petal, 2-lobed; basal lobes orbicular; distal lobes narrowly linear, apex acuminate. Filaments linear; anthers ovoid, apex obtuse. Ovary fusiform. Capsule ca. 2.5 cm. Fl. Jul–Sep, fr. Oct.

- Grasslands in valleys, shaded moist places by canals; 1200–2100 m. Chongqing (Nanchuan), W Hubei.


长柄凤仙花 chang bing feng xian hua

Plants annual, 60–100 cm tall, glabrous. Stem erect,
branched. Leaves alternate; petiole short, with 2 basal glands; leaf blade ovate-lanceolate, 5–9 × 2–3 cm, lateral veins 5–7 pairs, base cuneate, attenuate into petiole, margin crenate-serate, teeth mucronulate, apex long acuminate. Inflorescences axillary or subterminal, racemose, 3–5–8–flowered; peduncles erect or spreading, long, distinctly overtopping leaves, 3–5.3 cm, slender; bracts often caducous, subulate or subulate-lanceolate. Flowers yellow, ca. 2.5 cm deep. Lateral sepals 2, ovate, hooked-curved, 2–4 mm, apex elongated into awn 3–4 mm. Lower sepal navicular, limb ca. 1 cm deep, base abruptly narrowed into a slender spur 2–2.5 cm; mouth oblique, 5–6 cm wide, tip 5–6 mm, fibrous, sometimes involute arista. Upper petal ovate, 7–8 mm, apex rounded; lateral united petals ca. 1.8 cm, 2-lobed; basal lobes long acuminate; distal lobes linear, slightly dilated at base, apex obtuse; auricle small, narrow. Filaments linear; anthers obtuse. Ovary erect, fusiform. Capsule (immature) clavate, ca. 1 cm. Fl. Jul–Aug.

- By streams and along canals on slopes; 1700–2000 m. NW Yunnan.

This species is similar to Impatiens sicalifer and I. drepanophora but differs in having lateral sepals hooked-curved; lower sepal with mouth tip fibrous, long aristate; and bracts caducous, subulate.


鎬篠凤仙花 lian e feng xian hua

Plants robust, ca. 100 cm tall. Stem terete, branched, glabrous. Leaves alternate; petiole to 5 cm; leaf blade ovate-lanceolate, 6–13 × 2–4 cm, with 2 stipitate basal glands, glabrous, lateral veins 7–9 pairs, base cuneate, apex acuminate. Inflorescences axillary or subterminal, racemose, 5–10–flowered; peduncles spreading, 7–10(–15) cm. Pedicels 1.5–2 cm, slender, bracteate at base; bracts caducous, green, ovate-lanceolate, apex mucronulate to cuspidate, glandular. Flowers yellow, ca. 3.5 cm deep; buds ovoid. Lateral sepals 2, greenish, falcate, ca. 2 mm, apex long aristate. Lower sepal constricted into an involute-incurved spur; tip green, long cornute. Upper petal orange, slightly spurred; lateral united petals clawed; basal lobes red spotted, narrowly oblong; distal lobes oblong-dolabiform. Capsule clavate. Fl. Aug.

Understories of evergreen forests on slopes, by streams; 2000–2200 m. Xizang (Médog, Pamo), Yunnan [Bhutan, India, Myanmar, Nepal].


瑞丽凤仙花 rui li feng xian hua

Plants annual, 40–60 cm tall, glabrous. Stem erect, usually purple-tinged, branched. Leaves alternate, petiolate; leaf blade broadly elliptic to ovate, 7–13 × 3–6 cm, with 1 or 2 pairs of stipitate basal glands, both surfaces nearly glabrous, setose between teeth, lateral veins 7 or 8 pairs, base cuneate, narrowed, margin crenate, apex acute. Inflorescences in upper leaf axils of stem and branches, racemose, 5–12–flowered; peduncles erect or ascending, 6–12 cm. Pedicels 1.5–2 cm, slender, glabrous, bracteate at base; bracts caducous, navicular-ovate, 0.8–1 cm, apex aristate. Flowers yellowish, small, 1.5–2 cm deep. Lateral sepals 2, falcate-elliptic, ca. 2 mm, apex aristate. Lower sepal navicular, narrowed into an erect or curved spur; spur ca. 3 cm,
slender. Upper petal yellowish, slightly cucullate, obovate, ca. 8 × 6 mm, abaxial midvein carinate; lateral united petals not clawed, yellowish, reddish spotted, ca. 1.8 cm, 2-lobed; basal lobes obtriangular, ca. 9 × 3 mm, apex rounded; distal lobes narrowly curved-lanceolate, ca. 14 × 5 mm, apex slightly rounded; auricle absent or very narrow. Filaments linear; anthers obtuse. Ovary fusiform, glabrous. Capsule not seen. Fl. May. 2n = 18*.

- Understories of dense forests in valleys, on moist slopes; 700–1400 m. W Yunnan.


具角凤仙花 ju jiao feng xian hua

Plants annual, to 1 m tall, glabrous. Stem erect, nearly simple. Leaves alternate, upper leaves subverticillate, subsessile; petiole to 4 cm; leaf blade greenish and shiny abaxially, dark green adaxially, lanceolate or elliptic-lanceolate, ca. 13 × 4 cm, membranous, setose between teeth, lateral veins 8–11 pairs, base narrow, margin crenate-serrate, apex acuminate. Inflorescences in upper leaf axils, 8–20-flowered; peduncles usually overtopping leaves, slender. Pedicels fibrous, 1–2 cm, bracteate at base; bracts persistent, linear, ca. 3 mm. Flowers yellowish, purple spotted, ca. 2.5 cm deep. Lateral sepals 2, obliquely orbicular, curved-veined, apex acuminate or aristate. Lower sepal cup-shaped, narrowed into an incurved or involute, clavate spur; mouth tip gradually narrowed downward and long cuspitate or aristate. Upper petal orbicular, cup-shaped; lateral united petals not clawed, ca. 2.5 cm, 2-lobed; basal lobes obliquely broadly ovate, apex acute; distal lobes obliquely elliptic, ca. 2 × as long as basal lobes, apex acuminate. Filaments linear, ca. 5 mm; anthers obtuse. Ovary fusiform. Capsule linear, ca. 2.5 cm. Fl. Aug.–Sep.

Understories of mixed forests, along canals, moist places; 1700–2700 m. NW Yunnan [Myanmar].


膜苞凤仙花 mo bao feng xian hua

Plants annual, 25–50 cm tall. Stem erect, slender, branched or simple, glabrous. Leaves alternate, petiolate; leaf blade ovate or ovate-lanceolate, 2.5–8 × 1.5–3.5 cm, membranous, setose between teeth, base cuneate, margin coarsely crenate, apex acuminate. Inflorescences in upper leaf axils or terminal, racemose, 8–13-flowered; peduncles conspicuously overtopping leaves, slender. Pedicels 1.5–2 cm, slender; bracts caducous, ovate or broadly ovate, 4–5 mm, membranous, 5–7-veined, apex retuse, long mucronulate or cuspitate. Flowers purple, ca. 2 cm. Lateral sepals 2, ovate, 5–6 mm, long mucronulate. Lower sepal purple spotted, narrowly funnelform, narrowed into an involute, curved, long spur; mouth oblique, tip cornute, ca. 4 mm. Upper petal orbicular, ca. 6 mm in diam., abaxial midvein carinate, apex mucronulate; lateral united petals not clawed, 2-lobed; basal lobes subovate; distal lobes narrowly lorate. Anthers obtuse. Capsule linear, to 2 cm. Fl. Aug.


墨脱凤仙花 mo tuo feng xian hua

Plants annual, 5–20 cm. Stem procumbent or ascending, slender, lower nodes dilated, with fibrous roots, simple, rarely branched, glabrous. Leaves alternate; petiole 3–25 mm, with fibrous glands at base; leaf blade greenish abaxially, green adaxially, ovate or elliptic-ovate, 2–3.5(–5) × 1–3 cm, membranous, setose between teeth, lateral veins 5 pairs, base cuneate, margin coarsely crenate, apex obtuse or slightly acute. Inflorescences in upper leaf axils, 1- or 2(or 3)-flowered; peduncles shorter than leaves, slender. Bracts caducous, ovate-lanceolate, small, ca. 2 mm. Flowers pink, 1.5–2 cm deep. Lateral sepals 2, ovate, ca. 2 mm, apex mucronulate. Lower sepal narrowly funnelform, gradually narrowed into an incurved spur; mouth oblique, tip rostellate. Upper petal suborbicular, ca. 6 mm in diam., apex mucronulate, abaxial midvein narrowly carinate; lateral united petals not clawed, 2-lobed; basal lobes suborbicular, small; distal lobes dolabriform; auricle narrow, inflexed. Anthers obtuse. Ovary fusiform. Capsule unknown. Fl. Jul.–Aug.

- Stony slopes; ca. 3200 m. SE Xizang (Mêdog).


小距凤仙花 xiao ju feng xian hua

Plants perennial, 20–30 cm tall; rhizome procumbent, glabrous. Stems many, ascending or curved, purple, simple or branched. Leaves alternate, subsessile, lower leaves small, withering early, upper leaves crowded, subverticillate; leaf blade yellow-brown abaxially when dry, dark green adaxially, elliptic or ovate-elliptic, 5–9 × 2–3.5 cm, membranous, abaxially with stipitate fuseiform glands, setose between teeth, adaxially scabrid, lateral veins 5 or 6 pairs, base cuneate, narrowed, margin coarsely crenate, nearly entire basally, apex shortly acuminate or obtuse. Inflorescences in upper leaf axils, 1- or 2(or 3)-flowered; peduncles erect, shorter than leaves, 2–3 cm. Pedicels shortly bracteate at base or above; bracts ovate, 2–3 mm, membranous, apex emarginate, retuse, mucronulate. Flowers pink-purple, 2–2.5 cm deep. Lateral sepals 2, green, oblong-ovate, 3–4 mm, base oblique, apex rigidly mucronulate. Lower sepal funnelform, dilated at middle, 1.5–1.7 cm deep, narrowed into an erect, subglobose spur; mouth oblique, rostellate, nearly as long as limb, 5–6 mm wide. Upper petal broadly ovate, 8–9 mm, abaxial midvein thickened, narrowly carinate, green, mucronulate; lateral united petals not clawed, ca. 2 cm, 2-lobed; basal lobes ovate-orbicular, large; distal lobes lorate, longer, narrower, apex obtuse; auricle small. Filaments ligulate; anthers obtuse. Capsule not seen. Fl. Aug.–Sep.

- Forest understories; 2300–3500 m. NW Yunnan (Nu Jiang).

52. Impatiens holocentra Handel-Mazzetti, Symb. Sin. 7: 647. 1933.

同距凤仙花 tong ju feng xian hua
Plants annual, 30–50 cm tall. Leaves alternate, often crowded at apices of stem and branches; petiole 1–2.5 cm; leaf blade oblong-ovate or oblong-lanceolate, 5–17 × 2.5–4 cm, setose between teeth, lateral veins 7–11 pairs, base cuneate, margin coarsely crenate, apex ciliate-acuminate. Inflorescences axillary, racemose, 4–6-flowered; peduncles 6–8 cm. Pedicels 2–2.5 cm, bracteate at middle; bracts caducous, linear. Flowers yellow, small. Lateral sepals 4; outer 2: broadly ovate, apex acute; inner 2: linear, minute. Lower sepal narrowly funnelform, narrowed into an erect or slightly curved spur; mouth tip acuminate. Upper petal ovate, ca. 1.2 × 0.8 cm, apex slightly rostellate, abaxial midvein not carinate; lateral united petals yellow, ca. 2.8 cm, 2-lobed; basal lobes narrowly ovate to narrowly elliptic, 1.3–1.4 cm × 3–4 mm, apex rounded; distal lobes falcate, 1.8–2 cm × 3 mm, apex rounded; auricle inflexed, narrowly ovate. Capsule glabrous. Capsule ?linear. Fl. Aug. 2n = 18*.

- Forests; 1900–2500 m. SW Yunnan.


绿春凤仙花 lü chun feng xian hua

Plants annual, ca. 40 cm tall. Leaves alternate, petiolate or sessile in upper leaves; petiole 2–3 cm; leaf blade elliptic, 6–9 × 2.5–3 cm, both surfaces glabrous, base cuneate, margin crenate, apex acute. Inflorescences in upper leaf axils, ascending, racemose, 1- or 2-flowered; peduncles 1.5–3 cm, glabrous. Pedicels 1–1.2 cm, glabrous, bracteate at base; bracts not caducous, ovate, ca. 4 mm. Flowers yellow, ca. 2 cm, 2.5 cm deep. Lateral sepals 4; outer 2: ovate, ca. 4 mm, apex acute; inner 2: minute, ca. 1 mm, membranous. Lower sepal yellow, narrowly ovate, narrowed into a long recurved spur, ca. 1 cm, 2.6 cm deep including spur; mouth tip acute. Upper petal slightly ciliate, ovate, ca. 9 × 7 mm, apex slightly rostellate, abaxial midvein not carinate; lateral united petals yellow, ca. 1.9 cm, 2-lobed; basal lobes ovate, ca. 9 × 4 mm; distal lobes curved, narrowly elliptic, 1.4 × 0.3 mm, apex rounded; auricle slightly inflexed, narrow. Anthers obtuse. Capsule ?linear. Fl. Oct. 2n = 18*.

- Forests; 1900–2500 m. SW Yunnan.


独龙凤仙花 du long feng xian hua

Plants perennial, with procumbent rhizome and fibrous roots, glabrous. Stem erect or obliquely ascending, green or purple-tinged in upper part, 15–30 cm, simple or shortly branched at middle, naked in lower part. Leaves alternate, subverticillate on upper stem, subsessile or shortly petiolate; petiole to ca. 5 mm; leaf blade gray-green abaxially, sometimes becoming purple, green adaxially, oblong-ovate, or lanceolate, 4–10 × 1.5–2 cm, membranous, adaxially scurfy-strigose on veins, setose between teeth, lateral veins 6–8-pairs, base cuneate, attenuate into petiole, margin densely or coarsely crenate, teeth mucronulate or glandular, apex acumenate. Inflorescences in upper leaf axils, 1- or (2) or 3-flowered; peduncles erect, shorter than leaves, 2–4(–5) cm, slender. Pedicels 1–1.4 cm, bracteate at base; bracts persistent, ovate-lanceolate, ca. 3 mm, membranous. Flowers purple, 2–3 cm deep. Lateral sepals 4; outer 2: ovate, ca. 2–3 mm, submembranous, base oblique, apex mucronulate; inner 2: linear, minute, with apical glands. Lower sepal narrowly funnelform, limb ca. 1.5 cm deep, gradually narrowed into an erect or slightly curved spur; mouth oblique, 6–7 mm wide, tip long mucronulate. Upper petal 5–7 × 5–6 mm, yellow, navicular, narrowed into a long straight (rarely slightly curved) spur, ca. 1.2 cm, ca. 3.2 mm deep including spur; mouth tip apiculate. Upper petal ovate, ca. 1.2 × 0.8 cm, apex slightly rostellate, abaxial midvein not carinate; lateral united petals yellow, ca. 2.8 cm, 2-lobed; basal lobes narrowly ovate to narrowly elliptic, 1.3–1.4 cm × 3–4 mm, apex rounded; distal lobes falcate, 1.8–2 cm × 3 mm, apex rounded; auricle inflexed, narrow. Anthers obtuse. Ovary glabrous. Capsule ?linear. Fl. Aug. 2n = 18*.

- Understories of broad-leaved forests, riverbanks, shaded moist places; 1000–1400 m. W Yunnan (NE Myanmar).


马关凤仙花 ma guan feng xian hua

Plants annual, ca. 40 cm tall. Leaves alternate, somewhat crowded at upper part of stem, petiolate or nearly sessile in upper leaves; petiole 2–3.5 cm; leaf blade broadly elliptic, 8–11 × 4–6 cm, both surfaces nearly glabrous, base cuneate, margin crenate, apex acute. Inflorescences in upper leaf axils, ascending, racemose, 2–4-flowered; peduncles ca. 4 cm, glabrous. Pedicels 1.5–2 cm, glabrous, bracteate at base; bracts caducous, narrowly ovate, ca. 5 mm. Flowers yellow, ca. 3 cm, ca. 4 cm deep. Lateral sepals 4; outer 2: ovate, apex acute, 8–9 mm; inner 2: narrowly ovate, ca. 4 mm, membranous. Lower sepal yellow, navicular, narrowed into a long straight (rarely slightly curved) spur, ca. 1.2 cm, ca. 3.2 mm deep including spur; mouth tip apiculate. Upper petal ovate, ca. 1.2 × 0.8 cm, apex slightly rostellate, abaxial midvein not carinate; lateral united petals yellow, ca. 2.8 cm, 2-lobed; basal lobes narrowly ovate to narrowly elliptic, 1.3–1.4 cm × 3–4 mm, apex rounded; distal lobes falcate, 1.8–2 cm × 3 mm, apex rounded; auricle inflexed, narrow. Anthers obtuse. Ovary glabrous. Capsule ?linear. Fl. Aug. 2n = 18*.

- Understories of broad-leaved forests, riverbanks, shaded moist places; 1000–1400 m. W Yunnan [NE Myanmar].
apex retuse, abaxial midvein not carinate; lateral united petals not clawed, 1.4–1.5 cm, 2-lobed; basal lobes spreading, triangular, rounded; distal lobes narrowly lanceolate, longer, apex acute, often retuse; auricle small. Filaments linear, ca. 1.5 mm; anthers obtuse. Ovary fusiform. Capsule linear, ca. 1.5 cm. Seeds many. Fl. Aug–Sep, fr. Oct.

- By streams, shaded moist places, stony slopes; 2800–3700 m. NW Yunnan (Dulong Jiang, Gongshan).


紫色凤仙花  

Plants annual, 1–2 m tall. Stem erect, slender, simple or sometimes shortly branched from lower part. Leaves alternate, crowded at upper part of stem, petiolate or sessile in upper leaves; petiole 0.5–2 cm; leaf blade elliptic, ovate, or lanceolate, 7–15 × 2.5–6 cm, both surfaces glabrous, base cuneate, margin crenate, apex acute. Inflorescences in upper leaf axils, ascending, racemose, 3–5-flowered, or 1-flowered; peduncles 3–5 cm, glabrous. Pedicels ca. 2 cm, glabrous, bracteate at base; bracts persistent, ovate, 3–4 mm, apex acute. Flowers dark red-purple, ca. 2 cm, ca. 3 cm deep. Lateral sepals 4; outer 2: navicular, ovate or lanceolate, 4–5(–8) mm, apex acute; inner 2: minute, shorter than 1 mm, membranous. Lower sepal dark red-purple, navicular, narrowed into a slightly recurved spur ca. 1.3 cm, ca. 2.5 cm deep including spur; mouth tip rostellate. Upper petal slightly cucullate, orbicular, ca. 1 cm in diam., apex slightly retuse, abaxial midvein slightly carinate; lateral united petals dark red-purple, ca. 2 cm, 2-lobed; basal lobes oblong-orbicular to orbicular, ca. 1.2 × 0.5 cm, apex rounded; distal lobes lorniform, ca. 1.2 × 0.3 cm, apex rounded; auricle inflexed, narrowly lunate. Anthers obtuse. Capsule linear. Fl. Oct. 2n = 18.

Forests; 1700–1900 m. SW Yunnan [N Myanmar].

One of us (Chen) noted that according to the description and illustration, this species seems to be similar to *Impatiens taronensis*.


东北凤仙花  

Plants annual, 30–70 cm tall. Stem erect, slender, simple or branched, sparsely glandular hairy in upper part. Leaves alternate; petiole 1–2.5 cm; leaf blade rhombic-ovate or rhombic-lanceolate, 5–13 × 2.5–5 cm, lateral veins 7–9 pairs, base cuneate, margin sharply serrate, apex acuminate. Inflorescences axillary, racemose, 3–9-flowered; peduncles 3–5 cm, sparsely dark brown glandular hairy. Pedicels slender, bracteate at base; bracts linear. Flowers yellow or pale purple, small. Lateral sepals 2, ovate, cuspidate. Lower sepal funnelliform, abruptly elongated into an involute, long spur. Upper petal orbicular, apex shortly rostellate, abaxial midvein carinate; lateral united petals clawed, 2-lobed; basal lobes subovate, apex acute; distal lobes obliquely ovate, larger, apex acute. Anthers obtuse. Capsule subcylindric. Fl. and fr. unknown.

Forest margins, grasslands in valleys, riversides; 700–1100 m. Hebei, Heilongjiang, Jilin, Liaoning, Nei Mongol [Korea, Russia (Far East)].


野凤仙花  

*Impatiens japonica* Franchet & Savatier.

Plants annual, (30–)40–70(–100) cm tall. Stem erect, usually reddish tinged, many branched, with red-purple glandular hairs on branchlets and peduncles. Leaves alternate or subverticillate at upper parts of stem and branches, upper leaves smaller and subsessile; petiole to 5 cm; leaf blade pale green abaxially, green adaxially, rhombic-ovate to ovate-lanceolate, rarely broadly lanceolate, 3–14 × 3–7 cm, abaxially glabrous or veins with multicellular hairs, adaxially glabrous or nearly so, lateral veins 7 or 8 pairs, base cuneate, slightly obtuse in upper leaves, rarely obtuse-rounded, margin sharply serrate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, 4–10-flowered; peduncles ascending, 3–10 cm. Pedicels 1–2 cm, slender, bracteate at base; bracts ovate-lanceolate to triangular-ovate, 3–5 mm. Flowers purplish or purple-red, purple spotted, large, 2.5–4 cm deep. Lateral sepals 2, dark purple-red, broadly ovate, 0.6–1 × 0.4–0.6 cm, apex acute. Lower sepal dark purple spotted and yellowish, campanulate-funnelliform, 2.5–3 cm deep, gradually narrowed into an involute spur; mouth oblique, 1.5–1.8 cm, tip acuminate. Upper petal ovate-tetragonal to oblate, ca. 1.2 cm wide, apex mucronulate, abaxial midvein carinate; lateral united petals clawed, ca. 2 cm, 2-lobed; basal lobes ovate or ovate-oblong, apex curved, acuminate; distal lobes ovate to oblanceoliform. Filaments linear, 3–4 mm; anthers ovoid, apex obtuse. Ovary erect, fusiform. Capsule fusiform-cylindric, 1.8–1.1 cm. Seeds brown, few, elliptic, ca. 4 mm, tuberculate. Fl. Aug–Sep.

By streams, along canals; 1000–1100 m. Jilin, Liaoning, Shandong [Korea, Japan, Russia (Far East)].

*Impatiens textorii* f. pallescens (Honda) H. Hara (*Impatiens textorii* var. *pallescens* Honda) differs in having a white flower and a purple spotted lower sepal.


水凤仙花  

*Impatiens tongchouenensis* H. Léveillé.

Plants annual, 30–50 cm tall, glabrous. Stem erect, green or purple-tinged, long naked in lower part, nodes swollen with few adventitious roots, sparsely glandular hairy in upper part, simple or sometimes shortly branched from lower part. Leaves alternate, crowded at upper part of stem, shortly petiolate or subsessile; petiole 5–15 mm, with 2 stipitate glands at base; leaf blade pale green or becoming purple when dry abaxially, green adaxially, lanceolate or ovate-lanceolate, or ovate-oblong, 5–12 × 1.5–2.5 cm, rigidly papery, setose between teeth, lateral veins 6–8 pairs, base attenuate into petiole, margin crenate-serrate or serrulate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, 6–10-flowered; peduncles erect, over subtending leaves, 7–12 cm, stout. Pedicels 1–1.5 cm, slightly elongate at fruiting, bracteate at base; bracts caducous, ovate-oblong, 5–
6 × 2–3 mm, membranous, apex acuminate. Flowers pink-purple, large, 3.5–4 cm deep. Lateral sepals 2, obliquely ovate or ovate, 8–10 mm, apex rounded, cuspidate. Lower sepal incurved, shortly saccate, 3–3.5 cm deep, narrowed into an incurved spur ca. 2 cm; mouth vertical or oblique, 1–1.2 cm wide, tip rostellate. Upper petal orbicular or oblate, 1–1.5 cm in diam., apex mucronulate, abaxial midvein not thickened; lateral united petals not clawed, 2–2.5 cm; basal lobes orbicular; distal lobes ca. 2 × as long as basal lobes, below middle enlarged, downward becoming narrow; auricle small. Filaments linear, 2–3 mm; anthers obtuse. Ovary erect, fusiform, ca. 3 mm. Capsule linear, 1.5–2 cm. Seeds few, brown, oblong, 2–3 mm, tuberculate. Fl. Aug–Sep, fr. Oct.

- Lakesides, riversides, shaded moist places; 1500–3000 m. Yunnan.


滇水金凤 dian shui jin feng

Plants annual, 60–80 cm tall, glabrous. Stem erect, robust, lower nodes swollen, with adventitious branches; branchlets spreading, short. Leaves alternate, subsessile; petiole with 1 pair of glosbose basal glands; leaf blade pale green or becoming purple when dry abaxially, dark green adaxially, lanceolate or narrowly lanceolate, 8–19 cm, membranous, with few stipitate glands at base, lateral veins 6–8 pairs, mucronulate. Inflorescences often in upper leaf axils, subcorymbose, 3–5-flowered; peduncles shorter than leaves, 8–9 cm. Pedicels 1–1.5 cm, slender, bracteate at base; bracts caducous, ovate, 4–5 mm, apex acuminate. Flowers red, 2.5–3 cm deep. Lateral sepals 2, obliquely ovate-orbicular, ca. 5 × 3 mm, multifid, apex acuminate. Lower sepal funnelform, limb 1.4–1.5 cm deep, narrowed into an incurved spur subequal to limb; mouth oblique, 1.3–1.5 cm wide, tip acute. Upper petal orbicular, 1–1.1 cm in diam., apex cuspidate, abaxial midvein thickened, cristate; lateral united petals not clawed, short, ca. 1.5 cm; basal lobes rounded; distal lobes semicircular, ca. 2 × as long as basal lobes, apex narrowed; auricle small. Filaments linear, ca. 3 mm; anthers small, apex obtuse. Ovary erect, fusiform. Capsule subcylindric, 1.5–2 cm. Seeds few, black, oblong, 4–5 mm. Fl. Jul–Aug, fr. Sep. 2n = 18*.

- Forest understories, along canals, by streams, shaded moist places; 1500–2600 m. Yunnan.


苍山凤仙花 cang shan feng xian hua

Plants annual, small, 15–20 cm tall. Stem purple, slender, succulent, many branched from base; stem, branches, and peduncles deep purple spotted. Leaves subsessile or shortly petiolate; petiole with 2 sessile basal glands; leaf blade abaxially greenish, inconspicuously purple spotted, ovate or ovate-lanceolate, 1–2 cm × 5–8 mm, rigidly papery, lower part with 2 or 3 pairs of ciliate stipitate glands, lateral veins 3 or 4 pairs, base narrowly cuneate, margin crenate-serrate or serrulate, apex slightly acute or shortly acuminate. Inflorescences in upper leaf axils, 1(or 2)-flowered, sometimes with abortive flowering bud; peduncles often overtopping leaves. Pedicels 5–7 mm, bracteate at base; bracts caducous, ovate, ca. 2 mm. Flowers purple, ca. 2 cm deep. Lateral sepals 2, obliquely ovate-lobiculate, ca. 3 × 2.5 mm, abaxially thickened, apex mucronulate. Lower sepal saccate-funnelform, 1–1.1 cm deep, narrowed into an incurved spur ca. 6 mm. Upper petal tetragonal-lobiculate, ca. 6 × 11 mm, apex emarginate, abaxial midvein narrowly carinate; lateral united petals not clawed, short, ca. 1.1 cm, 2-lobed; basal lobes subtetragonal; distal lobes broadly doloribiform, ca. 2.5 × as long as basal lobes, apex acute; auricle inflexed, subovate. Filaments linear; anthers obtuse. Ovary fusiform, ca. 3 mm, rostellate. Capsule subfusciform, 1.2–1.5 cm. Seeds brown, oblong-ovoid, compressed, ca. 3 mm, smooth. Fl. Sep–Oct.

- Shaded moist places in forest understories, along canals. NW Yunnan (Dali).


井冈山凤仙花 jing gang shan feng xian hua

Plants annual, 30–90 cm tall, glabrous. Stem erect or obliquely ascending, green, striate when dry, succulent, simple or sometimes shortly branched, lower nodes swollen, with many fibrous roots. Leaves alternate; petiole 1.5–3.5 cm, with 2 stipitate basal glands; leaf blade pale green abaxially, green adaxially, ovate-lanceolate or oblong-lanceolate, 8–13 × 1.5–2.5 cm, setose between teeth, lateral veins 5–7 pairs, base cuneate, attenuate into petiole, margin coarsely crenate, apex acuminate. Inflorescences in upper leaf axils, subcorymbose, 3–8-flowered; peduncles often conspicuously overtopping leaves. Pedicels 1–1.5 cm, elongate at fruiting, slender, bracteate at base; bracts persistent, lanceolate or linear-lanceolate, 3–5 mm, thick, apex acuminate. Flowers purple or pink, 1.5–2.5 cm deep. Lateral sepals 2, obliquely ovate, 6–9 × 3–4 mm, inequilateral, conspicuously veined, apex mucronulate. Lower sepal broadly funnelform, narrowed into an incurved spur 1.5–2 cm; mouth nearly vertical or slightly oblique, 1–1.2 cm, tip acute. Upper petal suborbicular, 1–1.1 cm in diam., base truncate, apex emarginate, mucronulate, abaxial midvein cristate; lateral united petals not clawed, ca. 1 cm, 2-lobed; basal lobes suborbicular; distal lobes doloriform, broad, apex slightly acute; auricle inflexed, large. Filaments linear; anthers small, apex obtuse. Ovary erect, fusiform, 2–3 mm. Capsule linear, 1.7–2.2 cm. Seeds many, brown, obovoid, ca. 3 mm, tuberculate. Fl. and fr. Aug–Oct.

- Understories of dense forests, riverbanks, shaded moist places; 800–1200 m. Hunan, Jiangxi (Jinggangshan).


滇东南凤仙花 dian dong nan feng xian hua

Plants 30–40 cm tall, glabrous. Stem erect, succulent, simple. Leaves alternate; petiole ca. 1 cm, without basal glands; leaf blade lanceolate or ovate-lanceolate, 2.5–7.5 cm, lateral veins 5 or 6 pairs, base cuneate, margin crenate-serrate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, 5–7-flowered; peduncles conspicuously overtopping leaves, ca.
10 cm. Pedicels ca. 1.8 cm, slender, bracteate at base; bracts caducous, ovate, small, 3–4 mm. Flowers blue-purple, ca. 2.5 cm deep, ca. 1.5 cm wide. Lateral sepals 2, obliquely ovate, 5–6 mm, 7- or 8-veined, apex acute. Lower sepal broadly saccate, abruptly narrowed into an incurved spur; spur ca. 2.5 cm, slender. Upper petal suborbicular, base cordate, 7–8 mm in diam.; lateral united petals shortly clawed, 2-lobed; basal lobes suborbicular, small; distal lobes dolabriliform, one side retuse, acute; auricle blue-purple, suborbicular. Filaments linear, 3–4 mm; anthers ovoid, apex obtuse. Ovary fusiform. Capsule linear-acuminate. Inflorescences subcorymbose-racemose, many flowered; peduncles erect. 

65. Impatiens sulcata Wallich in Roxburgh, Fl. Ind. 2: 458. 1824.

草莓凤仙花 cao mei feng xian hua

Impatiens gigantea Edgeworth (1846), not Arnott (1835).

Plants annual, (20–)60–120 cm tall. Stem erect, terete, robust, conspicuously grooved, simple or branched in upper part, sparsely glandular at nodes. Leaves opposite or verticillate in upper part of stem; petiole (0.5–)1.5–3.5 cm, sparsely glandular or without glands; leaf blade elliptic-ovate or ovate-lanceolate, (4–)6–20 × 2–5.5 cm, with red or purple stipitate basal glands, lateral veins 8–12 pairs, base cuneate or subrotund, slightly inequilateral, margin crenate-serrate, apex acuminate or long acuminate. Inflorescences subcorymbose-racemose, many flowered; peduncles 3.5–9 cm. Pedicels swollen at apex, bracteate at base; bracts pink or purple-red, lanceolate or ovate-lanceolate. Flowers purplish pink, large, 3–3.5 cm, 3–3.5 cm deep. Lateral sepals 2, obliquely ovate-cordate, ca. 7 × 4 mm, apex mucronulate. Lower sepal saccate, 1.5–1.8 cm deep, abruptly narrowed into an incurved spur 4–8 mm. Upper petal cucullate, suborbicular, apex curved-rostellate, abaxially not carinate; lateral united petals not clawed, 2.8–3.2 cm, broad; basal lobes subdolabriliform to oblong-ovate, ca. 1.4 × 0.6 cm, apex acute, cuspidate; distal lobes broadly dolabriliform to broadly elliptic or ovate, ca. 2 × 1 cm, apex acute. Anthers obtuse. Capsule pendulous, clavate, 2–2.5 cm. Seeds obovoid, rugose. Fl. and fr. Aug.–Sep. 2n = 18.

Understories of Picea forests, along canals, shaded moist places; 3000–4000 m. S Xizang [Bhutan, India, Kashmir, Nepal].

According to the literature, the seeds are edible.


藏西凤仙花 zang xi feng xian hua

Plants annual, 15–30 cm tall. Stem erect, simple or branched, in upper part subtetragonal, glabrous. Leaves alternate or subverticillate in upper part of stem, lower leaves petiolate, upper leaves sessile; petiole with 2 stipitate globose basal glands; leaf blade ovate-lanceolate, (3–)6–12 cm, glabrous, lateral veins 5–7 pairs, base cuneate or acute, margin coarsely serrate, apex acuminate. Inflorescences in upper leaf axils, racemose-subcorymbose, few flowered; peduncles erect. Pedicels slender, bracteate at base; bracts narrowly lanceolate, glandular, apex acute. Flowers pinkish. Lateral sepals 2, green, obliquely ovate, apex mucronulate. Lower sepal broadly funnel-form or saccate, abruptly narrowed into an incurved, slender spur. Upper petal orbicular, apex retuse, mucronulate; lateral united petals not clawed, 2-lobed; basal lobes yellow, red spotted, oblong, apex acute; distal lobes deep pink, dolabriliform, apex rounded. Anthers obtuse. Capsule pendulous, narrowly clavate, 1.5–2 cm. Seeds many, oblong, smooth. Fl. and fr. Aug.–Sep.

Along canals; ca. 3700 m. SW Xizang (Burang) [N India, Kashmir, Myanmar].


草莓凤仙花 cao mei feng xian hua

Plants annual, 30–70 cm tall. Stem often purple, tetragonous or nearly terete, robust, succulent, simple or shortly branched, glabrous. Leaves opposite in lower part of stem, alternate in upper part of stem; petiole 0.3–3 cm, with globose glands at base; leaf blade lanceolate or ovate-lanceolate, 3.5–10(–12) × 1.5–4 cm, lateral veins 7–9 pairs, base cuneate, margin crenate-serrate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, subcorymbose, 1–6-flowered; peduncles ca. as long as or slightly longer than leaves. Pedicels 0.5–1.7(–2) cm, apex often swollen, bracteate at base; bracts persistent, lanceolate, 5–6 mm, apex acuminate. Flowers purple or pale purple to light yellowish, 2–2.5 cm deep. Lower sepals 2, obliquely ovate, 6–7 mm, base subcordate, apex acuminate, shortly mucronulate. Lower sepal broadly funnel-form, to 2.7 cm deep, narrowed into an incurved, slender spur. Upper petal cordate-ovate, apex obtuse or emarginate, mucronulate, abaxial midvein inconspicuously thickened; lateral united petals not clawed, ca. 2 cm, 2-lobed; basal lobes subovate; distal lobes dolabriliform. Anthers obtuse. Capsule oblong-linear, ca. 2 cm. Fl. Jul.–Aug.

● Grasslands by rivers, moist places by canals, roadsides; 3100–3200 m. E Xizang.

The pale purple to pale yellow flowers of this species are similar to Impatiens sulcata, but the latter differs in that its lower sepal has an incurved, short spur.


抱茎凤仙花 bao jing feng xian hua

Plants annual, 20–40 cm tall. Stem tetragonous with glands at nodes, glabrous, simple or few branched. Leaves opposite in lower part of stem, alternate in upper part of stem, sessile; leaf blade oblong or oblong-lanceolate, 5–15 × 2.5–5 cm, glabrous, lateral veins 9 or 10 pairs, base rounded or cordate, amplexicaul, with globose glands, margin crenate-serrate throughout, teeth mucronulate, apex acuminate. Inflorescences axillary, umbellate or racemose, 6–12-flowered. Pedicels 1–1.5 cm, apex swollen, bracteate at base; bracts ovate-lanceolate. Flowers pink or pink-purple. Lateral sepals 2, obliquely orbicular, rarely falcate. Lower sepal obliquely saccate, abruptly narrowed into an inflexed, short spur. Upper petal suborbicular,

Thickets along roadsides; 2900–3200 m. Xizang [NW India, Nepal].


中甸凤仙花 zhong dian feng xian hua

Plants annual, 35–70 cm tall. Stem conspicuously striate or tetragonous, robust, succulent, simple or branched in upper part. Lower and middle leaves opposite; petiole short, 5–15 mm, with 2 stipitate glands at base; leaf blade ovate-oblong or oblong, 5–8 × 2–3 cm, glabrous, lateral veins 5–9 pairs, base rounded or slightly cordate, margin crenate-serrate, apex acuminate. Upper leaves alternate, sessile; leaf blade ovate or ovate-oblong, rarely ovate-lanceolate, 4–7 × 1.5–3.5 cm, base cordate, amplexical, apex acuminate. Inflorescences in upper leaf subcorymbose or racemose, usually 5–7-flowered; peduncles 3–5 cm. Pedicels 5–7 mm, swollen at apex, bracteate at base; bracts ovate-lanceolate. Flowers pink, 1.5–1.7 cm deep. Lateral sepals 2, obliquely ovate, 3.5–4 mm, 5-veined, base cordate, apex mucronulate. Lower sepals dark purple spotted, broadly cuneate, large. Flowers blue-purple. Lateral sepals 2, purple, ovate-orbicular, abaxially not carinate; lateral united petals ± clawed, ca. 1.4 cm, 2-lobed; basal lobes ovate-orbicular, apex acuminate; distal lobes oblong-dolabiform, apex slightly obtuse; auricle rounded. Filaments linear, ca. 4 mm; anthers obtuse. Ovary fusiform. Capsule linear-oblong, 1.4–2 cm. Seeds 8, black, oblong-ovoid, ca. 3 mm, smooth. Fl. Aug–Sep.

● Thickets by water, riversides, along canals, shaded moist places; 3200–3300 m. NW Yunnan (Xianggellia).


舟状凤仙花 zhou zhuang feng xian hua

Plants annual, 20–60 cm tall. Stem robust, simple or branched, glabrous, branched. Leaves alternate, crowded at upper part; petiole (0.5–)2–7 cm, with globose glands at base; leaf blade ellipsoid or elliptic-lanceolate, 7–15–(20) × 4–6.5 cm, membranous, both surfaces glabrous or sparsely pilose, setose at base, lateral veins 10–12 pairs, base cuneate, margin coarsely crenate, apex caudate-acuminate. Inflorescences crowded in leaf axils, racemose, many ﬂowered; peduncles erect, to 25 cm. Pedicels fasicled or verticillate, 1.5–2.5 cm, slender, bracteate at base; bracts ovate, with conspicuous aristate glands at apex. Flowers pale blue-purple, 1.5–2.8 cm deep. Lateral sepals 2, obliquely ovate, small, 4–6 mm, with aristate glands at apex. Lower sepal purple spotted, broadly sigmoid-curved-saccate, 1.5–2 cm, 2–2.5 cm deep (excluding spur), abruptly constricted into a hooked or incurred spur; mouth cormate. Upper petal cuculate, suborbicular, 1.1–1.2 × 1.4–1.6 cm, apex mucronulate; lateral united petals not clawed, 3.2–4 cm, 2-lobed; basal lobes ovate to suborbicular, 1.1–1.3 × 0.7–0.9 cm, apex truncate to rounded; distal lobes narrowly caudate, 2–2.7 × 0.6–0.7 cm, apex long tapered, acute; auricle inﬂexed, small. Anthers obtuse. Capsule cylindric. Seeds 8 or 9, subcylindric, shiny. Fl. Jun–Aug. 2n = 18.

Understories of Tsuga forests, grasslands by water; 2400–2800 m. S Xizang [N India, Nepal].


米林凤仙花 mi lin feng xian hua

Plants annual, 35–70 cm tall. Stem conspicuously striate, green, sometimes red-tinged, conspicuously noded, branched, glabrous. Leaves alternate; petiole 0.25–2.5 cm, without basal glands; leaf blade elliptic-ovate or ovate-lanceolate, 8–18 × 3–6.5 cm, membranous, glabrous, lateral veins 9–11 pairs, base cuneate, attenuate into petiole, margin slightly coarsely crenate, apex acuminate, rarely caudate-acuminate. Inflorescences axillary and subterminal, racemose, 1–4(or 5)-flowered; peduncles often shorter than leaves. Pedicels 1–2 cm; bracts cadu- cious, large. Flowers blue-purple. Lateral sepals 2, purple, ovate-orbicular, 1–1.1 cm, apex acuminate. Lower sepal deeply naviculate, abruptly narrowed into a slightly curved spur. Upper petal orbicular, abaxially not carinate; lateral united petals ± clawed, 2-lobed; basal lobes orbicular; distal lobes oblong-dolabiform. Anthers obtuse. Capsule linear, 2.5–3 cm. Fl. Aug–Sep. 2n = 18, 19.

Forest understories, shaded moist places on slopes; ca. 2500 m. Xizang (Zhangmu) [Bhutan, India (Sikkim), Myanmar, Nepal].
73. Impatiens urticifolia Wallich in Roxburgh, Fl. Ind. 2: 457. 1824.

荨麻叶凤仙花 qian ma ye feng xian hua

Plants annual, 50–100 cm tall. Stem usually slender, glabrous, branched. Leaves alternate, lower leaves long petiolate, upper leaves sessile; petiole 2–5.5 cm, with stipitate or sessile basal glands; leaf blade elliptic-ovate, elliptic, or oblong-lanceolate, 8–20 × 2.5–5.5 cm, membranous, both surfaces glabrous, setose between teeth, lateral veins 9–12 pairs, base cuneate, margin crenate, apex acuminate. Inflorescences usually axillary or subterminal, 3–5-flowered; peduncles spreading or ± curved, shorter than or longer than leaves, slender. Pedicels longer than bracts, fibrous or slender; bracts persistent, ovate-lanceolate. Flowers yellow or pale purple, red striate, ca. 2.5 cm in diam. Lateral sepals 2, obliquely ovate, often with glands on one side. Lower sepal obliquely saccate, short, abruptly narrowed into an incurved, short spur. Upper petal orbicular, abaxial midvein inconspicuously crenate; lateral united petals not clawed, 2-lobed; basal lobes orbicular, 2–5 × 1.5–3 mm; distal lobes broadly dolabiform, 0.7–1.4 × 0.4–0.7 cm, apically 2-lobed, apex rounded. Anthers obtuse. Capsule linear or narrowly clavate, to 2.5 cm. Seeds many, brown, oblong, smooth. Fl. Jun–Aug.

Grasslands along canals, mossy or stony slopes; 1200–3300 m. Xizang [Bhutan, NE India, Kashmir, Myanmar, Nepal].

1a. Plants 20–60 cm tall; lower sepal with an incurved, long spur ............... 75a. var. racemosa
1b. Plants 3–5 cm tall; lower sepal with a very short spur or without spur .......... 75b. var. ecalcarata

75a. Impatiens racemosa var. racemosa 总状凤仙花 (原变种) zong zhuang feng xian hua (yuan bian zhong)

Impatiens microscadiata J. D. Hooker.

Plants 20–60 cm tall. Lower sepal with an incurved, long spur.

Grasslands along canals; 1200–2400 m. Xizang (Zhangmu) [Bhutan, NE India, Kashmir, Nepal].

75b. Impatiens racemosa var. ecalcarata var. ecalcarata 总状凤仙花 (原变种) zong zhuang feng xian hua (yuan bian zhong)

Impatiens microscadiata J. D. Hooker.

Plants 20–60 cm tall. Lower sepal with an incurved, long spur.

Grasslands along canals; 1200–2400 m. Xizang (Zhangmu) [Bhutan, NE India, Kashmir, Nepal].


疏花凤仙花 shu hua feng xian hua

Impatiens micranthemum Edgeworth.

Plants annual, 30–50 cm tall. Stem erect, glabrous, branched. Leaves alternate; petiole with 2 large basal glands; leaf blade ovate-lanceolate or elliptic-lanceolate, membranous, both surfaces glabrous, setose between teeth, lateral veins 5–7 pairs, base cuneate, attenuate into petiole, margin crenate, apex acuminate. Inflorescences subterminal, racemose, 6–11-flowered; peduncles slender. Pedicels slender, bracteate at

6–11-flowered; peduncles slender. Pedicels slender, bracteate at
base; bracts persistent, ovate-lanceolate, small. Flowers pale pink or white, small. Lower sepal ovate or ovate-subulate, small, 3-veined, apex glandular mucronulate or apiculate. Lower sepal navicular, with erect, short spur. Upper petal orbicular, with a black gland on each side of base; lateral united petals not clawed, 2-lobed; basal lobes orbicular; distal lobes oblong-dolabriform. Anthers obtuse. Capsule clavate. Fl. Aug.

Along canals; ca. 3200 m. Xizang (Cona) [Bhutan, N India, Kashmir, Nepal].


**白汉洛凤仙花** bai han feng xian hua

Plants annual, to 100 cm tall, glabrous, with short supporting roots, simple or branched, ± succulent below with swollen nodes. Leaves alternate, remote in lower part of stem and petiole to 5 cm, ± crowded in upper part of stem and subsessile; leaf blade pale green abaxially, deep green adaxially, ovate or ovate-oblong, 5–12 × 2.5–4.5 cm, submembranous, stipular glands subulate or broadly linear, setose between teeth, often with sparse glands along basal margin, lateral veins 5–9 pairs, fine, curved, base narrowed or rarely subrounded, margin crenate-serrate, apex acuminate. Inflorescences terminal or in upper leaf axils, racemose, many flowered; peduncles overtopping petals, 8–13 cm. Pedicels spreading, 1–1.7 cm, slender, bracteate at base; bracts persistent, linear or linear-lanceolate, 1–2 mm, apex aristate. Flowers pink, ca. 1 cm. Lower sepals 2, broadly ovate, very small, 1–2 mm, apex long mucronulate. Lower sepal navicular, narrowed into an incurved spur; spur ca. 1 cm, slender; mouth vertical, acuminate. Upper petal green, cucullate, broadly ovate, ca. 3 mm, abaxial midvein not thickened, not carinate; lateral united petals not clawed, ca. 6 mm, 2-lobed; basal lobes orbicular, ca. 4 mm. Filaments linear, very short; anthers orbicular, apex obtuse. Ovary fusiform. Capsule fusiform, 8–15 mm. Fl. Jul–Aug.

● Margins of bamboo forests, mixed forests in valleys; 300–3000 m. NW Yunnan (Dulong Jiang-Nu Jiang divide).

78. *Impatiens parviflora* Candolle, Prodr. 1: 687. 1824.

**小花凤仙花** xiao hua feng xian hua

Plants annual, 30–60 cm tall, glabrous, with short supporting roots, simple or branched, ± succulent below with swollen nodes. Leaves alternate, remote in lower part of stem and petiole to 5 cm, ± crowded in upper part of stem and subsessile; leaf blade pale green abaxially, deep green adaxially, ovate or ovate-oblong, 5–12 × 2.5–4.5 cm, submembranous, stipular glands subulate or broadly linear, setose between teeth, often with sparse glands along basal margin, lateral veins 5–9 pairs, fine, curved, base narrowed or rarely subrounded, margin crenate-serrate, apex acuminate. Inflorescences terminal or in upper leaf axils, racemose, many flowered; peduncles overtopping petals, 8–13 cm. Pedicels spreading, 1–1.7 cm, slender, bracteate at base; bracts persistent, linear or linear-lanceolate, 1–2 mm, apex aristate. Flowers pink, ca. 1 cm. Lower sepals 2, broadly ovate, very small, 1–2 mm, apex long mucronulate. Lower sepal navicular, narrowed into an incurved spur; spur ca. 1 cm, slender; mouth vertical, acuminate. Upper petal green, cucullate, broadly ovate, ca. 3 mm, abaxial midvein not thickened, not carinate; lateral united petals not clawed, ca. 6 mm, 2-lobed; basal lobes orbicular, ca. 4 mm. Filaments linear, very short; anthers orbicular, apex obtuse. Ovary fusiform. Capsule fusiform, 8–15 mm. Fl. Jul–Aug.

Plants annual, 30–60 cm tall, glabrous, with short supporting roots, simple or branched, ± succulent below with swollen nodes. Leaves alternate, remote in lower part of stem and petiole to 5 cm, ± crowded in upper part of stem and subsessile; leaf blade pale green abaxially, deep green adaxially, ovate or ovate-oblong, 5–12 × 2.5–4.5 cm, submembranous, stipular glands subulate or broadly linear, setose between teeth, often with sparse glands along basal margin, lateral veins 5–9 pairs, fine, curved, base narrowed or rarely subrounded, margin crenate-serrate, apex acuminate. Inflorescences terminal or in upper leaf axils, racemose, many flowered; peduncles overtopping petals, 8–13 cm. Pedicels spreading, 1–1.7 cm, slender, bracteate at base; bracts persistent, linear or linear-lanceolate, 1–2 mm, apex aristate. Flowers pink, ca. 1 cm. Lower sepals 2, broadly ovate, very small, 1–2 mm, apex long mucronulate. Lower sepal navicular, narrowed into an incurved spur; spur ca. 1 cm, slender; mouth vertical, acuminate. Upper petal green, cucullate, broadly ovate, ca. 3 mm, abaxial midvein not thickened, not carinate; lateral united petals not clawed, ca. 6 mm, 2-lobed; basal lobes orbicular, ca. 4 mm. Filaments linear, very short; anthers orbicular, apex obtuse. Ovary fusiform. Capsule fusiform, 8–15 mm. Fl. Jul–Aug.

● Margins of bamboo forests, mixed forests in valleys; 300–3000 m. NW Yunnan (Dulong Jiang-Nu Jiang divide).


**短距凤仙花** duan ju feng xian hua

Plants annual, 30–60 cm tall, with fibrous roots. Stem erect, succulent, branched or simple. Leaves alternate; petiole 1–2.5 cm; leaf blade elliptic or ovate-elliptic, 6–15 × 2.5–5 cm, lateral veins 5–7 pairs, base cuneate, margin crenate-serrate, teeth mucronulate, apex acuminate. Inflorescences axillary, racemose, 4–12-flowered; peduncles 5–10 cm. Pedicels slender, bracteate at base; bracts persistent, lanceolate, small. Flowers erect, whitish, very small. Lower sepals 2, ovate, apex slightly obtuse. Lower sepal navicular, ca. 1 mm, narrowed into a short, triangular spur shorter than 1 mm. Upper petal broadly obovate; lateral united petals ± clawed, 2-lobed; basal lobes oblong; distal lobes broadly oblong, large. Anthers obtuse. Capsule linear-oblong, ca. 2 cm. Fl. Aug–Sep.

Forest understories on slopes, forest margins, along canals, mossy places; 800–2000 m. Xinjiang [Kazakhstan, Kyrgyzstan].


**直角凤仙花** zhi jiao feng xian hua

Plants annual, 30–70 cm tall, glabrous, with few supporting roots. Stem erect, branched, naked in lower part. Leaves alternate, crowded in upper part of stem and subsessile, lower leaves with petiole ca. 4.5 cm; leaf blade pale green abaxially, dark green adaxially, ovate or ovate-lanceolate, 4–17 × 2.5–5 cm, membranous, with stipitate glands, adaxially sparsely brown pilose, setose between teeth, lateral veins 5–10 pairs, base narrowed, margin densely carinate, apex acuminate. Inflorescences in terminal leaf axils, racemose, many flowered; peduncles overtopping or ca. as long as leaves, 7–15 cm, slender, rigid. Pedicels fibrous, 1.2–2 cm, elongate at fruiting, bracteate at base; bracts persistent, lanceolate or setose, 1–3 mm. Flowers sulfur-colored, 1.5–2 cm deep. Lower sepals 2, green, obliquely ovate or nearly sigmoid, 2–4 mm, apex mucronulate. Lower sepal navicular, ca. 8 mm, gradually narrowed into a rectangular spur ca. 3.5 cm; tip acuminate. Upper petal subtetragonous-orbicular, ca. 6 mm, apex emarginate, abaxial midvein carinate; lateral united petals not clawed, 2-lobed; basal lobes orbicular; short; distal lobes broadly or narrowly dolabriform, ca. 2 × as long as basal lobes, apex obtuse; auricle suborbicular. Filaments linear; anthers orbicular, small. Capsule fusiform, 2.5–3 cm. Seeds many (ca. 10), brown, orbicular, ca. 3 mm in diam. Fl. and fr. Sep–Oct.

粗茎凤仙花 cu jing feng xian hua

Plants annual, 20–30 cm tall, glabrous. Stem erect, succulent, nodes swollen, with adventitious roots, simple or branched from base. Leaves often crowded in upper part of stem, alternate, petiolate, upper leaves shortly petiolate; leaf blade pale green abaxially, dark green adaxially, ovate or ovate-lanceolate, 5–8 × 3–3.5 cm, membranous, lateral veins 6–8 pairs, spreading and curved, base cuneate or narrowed, margin crenate, teeth mucronulate, apex shortly acuminated. Inflorescences in upper leaf axils, (2 or)3- or 4-flowered; peduncles 3–4(–6) cm, slender. Pedicels 1–2 cm, slender, bracteate at base; bracts persistent, linear or linear-lanceolate, 1–5 mm, membranous. Flowers sulfur-colored, 1.1–1.5 cm deep. Lateral sepals 2, broadly ovate or orbicular, ca. 3 mm, apex shortly mucronulate. Lower sepal navicular; mouth vertical, ca. 7 mm, tip acute, base constricted into a slightly erect, incurved spur; spur cornate, 1–1.2 cm. Upper petal green, cucullate, orbicular, ca. 4 mm in diam., margin scarious, abaxial midvein thickened, 2-cornute-carinate; lateral united petals not clawed, ca. 9 mm, 2-lobed; basal lobes broadly obovate-orbicular or retuse; distal lobes broadly subobovate, ca. as long as basal lobes, abaxially or laterally denticulate, apex rounded. Filaments ligulate; anthers orbicular, apex acute. Ovary striate, fusiform. Capsule erect, narrowly clavate, 1–1.8 cm. Seeds few, ca. 6 Fl. and fr. Jul.–Aug.

82. Impatiens crassicaudex J. D. Hooker, Hooker’s Icon. Pl. 30: t. 2957. 1911.

粗茎凤仙花 cu jing feng xian hua

Plants annual, 20–30 cm tall. Stem robust, ca. 1 cm in diam. at base, succulent, with many fibrous roots, many branched from base. Leaves alternate; petiole 1–3 cm; leaf blade ovate, 3–5 × 1–2 cm, glabrous, lateral veins 4 or 5 pairs, base attenuate into petiole, margin crenate-serrate, apex caudate-acuminate. Inflorescences many, axillary or terminal, racemose, few flowered; peduncles shorter or longer than leaves. Pedicels 5–7 mm, slender; bracts caducous, small. Flowers purplish, small, 8–9 mm in diam. Lateral sepals 2, falcate, minute. Lower petal ovate-orbicular, abaxial midvein carinate; lateral united petals 2-lobed; lobes orbicular. Anthers short, broad, apex obtuse. Capsule shortly clavate, 0.8–1 cm, 5-angled, densely or sparsely tuberculate along ribs. Seeds few, brown, compressed, oblong. Fl. Aug–Sep.


脆弱凤仙花 cui ruo feng xian hua

Plants annual, 30–60 cm tall, glabrous. Stem erect, branched. Leaves alternate; petiole 2–3 cm; leaf blade ovate or ovate-lanceolate, 3–13 × 1.5–3 cm, thinly membranous, both surfaces glabrous and same in color, lateral veins 6–8 pairs, base cuneate, margin crenate, teeth mucronulate, apex acuminate or long acuminate. Inflorescences in upper leaf axils, corymbose or racemose, few to more than 10-flowered; peduncles 5–7 cm. Pedicels 1–1.5 mm, slender; bracts persistent, ovate-lanceolate. Flowers yellow, 1.5–2 cm deep. Lower sepal navicular, narrowed into an incurved or involute spur; spur long, to 2 cm. Upper petal obovate-orbicular, cup-shaped, abaxial midvein obtusely crista; lateral united petals ± clawed, 2-lobed; basal lobes broadly orbicular; distal lobes dolabiform; auricle inflexed. Anthers obtuse. Capsule narrowly fusiform, 1.5–2 cm. Seeds obvoid, tuberculate. Fl. Jul–Sep.


瘤果凤仙花 liu guo feng xian hua

Plants annual, 20–30 cm tall. Stem erect, branched, glabrous throughout. Leaves alternate; petiole 5–6 mm, without basal glands; leaf blade elliptic or elliptic-ovate, 1.5–3 × 1–1.5 cm, setose between teeth, lateral veins 5 or 6 pairs, base cuneate or subtruncate, margin crenate, apex acuminate. Inflorescences axillary or terminal, racemose, 5–6-flowered; peduncles shorter or longer than leaves. Pedicels 5–7 mm, slender; bracts caducous, small. Flowers purplish, small, 8–9 mm in diam. Lateral sepals 2, falcate, minute. Lower sepal navicular, with a very short spur. Upper petal cucullate, orbicular, abaxial midvein carinate; lateral united petals 2-lobed; lobes orbicular. Anthers short, broad, apex obtuse. Capsule shortly clavate, 0.8–1 cm, 5-angled, densely or sparsely tuberculate along ribs. Seeds few, brown, compressed, oblong. Fl. Aug–Sep.

Margins of Abies forests, grasslands, along canals; ca. 3800 m. W Xizang [Bhutan, India (Sikkim)].


多角凤仙花 duo jiao feng xian hua

Plants 30–70 cm tall, glabrous. Stem erect, stout in lower part, branched, stem and branches sparsely glandular. Leaves alternate; petiole to 1 cm, winged; leaf blade gray abaxially, ovate-lanceolate, 5–7 × 2–3 cm, thinly membranous, setose between teeth, lateral veins 5–7 pairs, base broadly cuneate, margin crenate, apex acuminate. Inflorescences many flowered; peduncles erect, nearly as long as upper leaves, slender. Pedicels fibrous, 1–1.5 cm, bracteate at base; bracts lanceolate, 2–3 mm, apex glandular aristate. Flowers orange, small. Lateral sepals 2, obliquely lanceolate, 3–4.5 mm, apex glandular aristate. Lower sepal navicular, limb to 2.5 cm deep, narrowed into an incurved spur longer than limb; mouth oblique, 6–8 mm, tip cuspidate. Upper petal orbicular or oblate, ca. 6 mm in diam., abaxial midvein conspicuously carinate; lateral united petals not clawed, 1–
Plants annual, 20–30 cm tall, glabrous. Stem erect, swollen in middle parts of stem; petiole 1–5 cm; leaf blade ovate, 3–10 × 1.5–3.5 cm, membranous, with 2 large basal glands, setose between teeth, lateral veins 5–7 pairs, base cuneate, margin coarsely crenate, apex acuminate. Inflorescences axillary, racemose, (3–)6–8–flowered. Pedicels short, bracteate at base; bracts caducous or persistent, linear or linear-oblong, 2–4 mm, apex acute. Flowers white, small, ca. 2 cm. Lateral sepals 2, ovate-orbicular, small, mucronulate. Lower sepal navicular, spur absent. Upper petal elliptic-ovoblate or suborbicular, apex mucronulate; lateral united petals broadly clawed, 2-lobed; basal lobes ovate-oblong or suborbicular; distal lobes narrowly dolabiform or oblong-dolabiform, longer; auricle broad. Anthers obtuse. Capsule linear, to 1.8 cm. Seeds few, obovoid. Fl. Jul–Sep.

88. Impatiens margaritifera

Plants annual, 40–50 cm tall, glabrous. Stem erect, branched or simple. Leaves alternate or opposite in lower and middle parts of stem; petiole 1–5 cm; leaf blade ovate, 3–10 × 1.5–3.5 cm, membranous, with 2 large basal glands, setose between teeth, lateral veins 5–7 pairs, base cuneate, margin coarsely crenate, apex acuminate. Inflorescences axillary, racemose, (3–)6–8–flowered. Pedicels short, bracteate at base; bracts caducous or persistent, linear or linear-oblong, 2–4 mm, apex acute. Flowers white, small, ca. 2 cm. Lateral sepals 2, ovate-orbicular, small, mucronulate. Lower sepal navicular, spur absent. Upper petal elliptic-ovoblate or suborbicular, apex mucronulate; lateral united petals broadly clawed, 2-lobed; basal lobes ovate-oblong or suborbicular; distal lobes narrowly dolabiform or oblong-dolabiform, longer; auricle broad. Anthers obtuse. Capsule linear, to 1.8 cm. Seeds few, obovoid. Fl. Jul–Sep.

1a. Plants short; leaves opposite in lower and middle parts of stem, upper leaves alternate; inflorescences 3–6–flowered, bracts persistent; basal lobes of lateral united petals suborbicular, distal lobes oval-dolabiform ....................... 88c. var. humilis

1b. Plants relatively taller; leaves alternate; inflorescences 6–8–flowered, bracts caducous; basal lobes of lateral united petals ovate-oblong, distal lobes narrowly dolabiform.

2a. Flowers white; lateral sepals ovate-orbicular, apex mucronate ....................... 88a. var. margaritifera

2b. Flowers purplish; lateral sepals obliquely ovate, apex long mucronulate .................. 88b. var. purpurascens

88a. Impatiens margaritifera var. margaritifera

Plants annual, 40–50 cm tall, glabrous. Stem erect, branched or simple. Leaves alternate or opposite in lower and middle parts of stem; petiole 1–5 cm; leaf blade ovate, 3–10 × 1.5–3.5 cm, membranous, with 2 large basal glands, setose between teeth, lateral veins 5–7 pairs, base cuneate, margin coarsely crenate, apex acuminate. Inflorescences axillary, racemose, (3–)6–8–flowered. Pedicels short, bracteate at base; bracts caducous or persistent, linear or linear-oblong, 2–4 mm, apex acute. Flowers white, small, ca. 2 cm. Lateral sepals 2, ovate-orbicular, small, mucronulate. Lower sepal navicular, spur absent. Upper petal elliptic-ovoblate or suborbicular, apex mucronulate; lateral united petals broadly clawed, 2-lobed; basal lobes ovate-oblong or suborbicular; distal lobes narrowly dolabiform or oblong-dolabiform, longer; auricle broad. Anthers obtuse. Capsule linear, to 1.8 cm. Seeds few, obovoid. Fl. Jul–Sep.

88b. Impatiens margaritifera var. purpurascens

Plants annual, 40–50 cm tall, glabrous. Stem erect, branched or simple. Leaves alternate or opposite in lower and middle parts of stem; petiole 1–5 cm; leaf blade ovate, 3–10 × 1.5–3.5 cm, membranous, with 2 large basal glands, setose between teeth, lateral veins 5–7 pairs, base cuneate, margin coarsely crenate, apex acuminate. Inflorescences axillary, racemose, (3–)6–8–flowered. Pedicels short, bracteate at base; bracts caducous or persistent, linear or linear-oblong, 2–4 mm, apex acute. Flowers white, small, ca. 2 cm. Lateral sepals 2, ovate-orbicular, small, mucronulate. Lower sepal navicular, spur absent. Upper petal elliptic-ovoblate or suborbicular, apex mucronulate; lateral united petals broadly clawed, 2-lobed; basal lobes ovate-oblong or suborbicular; distal lobes narrowly dolabiform or oblong-dolabiform, longer; auricle broad. Anthers obtuse. Capsule linear, to 1.8 cm. Seeds few, obovoid. Fl. Jul–Sep.

88. Impatiens margaritifera

矮小无距风仙花 ai xiao wu ju feng xian hua

Plants short. Lower part of stem with opposite branches. Leaves opposite in lower and middle parts of stem, alternate in upper part of stem. Inflorescences 3–6-flowered; bracts persistent. Basal lobes of lateral united petals suborbicular; distal lobes oblong-dolabriform.

- On moss of Abies forest understories; 3700–4000 m. SW Sichuan, Xizang, NW Yunnan.

89. Impatiens puberula Candolle, Prodr. 1: 687. 1824.

柔毛凤仙花 rou mao feng xian hua

Plants annual, 30–60 cm tall. Stem erect, slender, simple or laxly branched, pubescent in upper part. Leaves alternate; petiole 0.5–2.5 cm; leaf blade elliptic or elliptic-lanceolate, 5–15 × 2.5–4.5 cm, membranous, basal glands absent, abaxially pubescent especially on veins, adaxially strigose, lateral veins 5–7 pairs, base cuneate, gradually attenuate into petiole, margin crenate, apex acuminate or long acuminate. Inflorescences terminal or in upper leaf axils, 1-flowered; peduncles absent. Pedicels 2.5–3.5 cm, bracteate at base; bracts subulate, brown pubescent. Flower blue-purple, 3–3.5 cm deep. Lateral sepals 4; outer 2: ovate-lanceolate, ca. 3 cm, 2-lobed; basal lobes broadly oblong; midvein not thickened; lateral united petals not clawed, 2–2.5 cm deep, gradually narrowed into a hooked, incurved spur; spur ca. 1 cm, stout; mouth tip acute, 1–1.5 cm wide. Upper petal orbicular, ca. 1.2 cm in diam., apex cuspidate, midvein not thickened; lateral united petals not clawed, 2–2.5 cm, 2-lobed; basal lobes broadly oblong, apex obtuse; distal lobes oblong-dolabriform. Pedicels shorter than leaves, 1–1.5 cm, slightly elongate at fruiting, bracteate at base; bracts persistent, lanceolate or setose, 4–5 mm, membranous. Flowers blue-purple, 3.5–4 cm deep. Lateral sepals 4; outer 2: subovate, swollen at middle, base rounded, apex curved, long mucronulate; inner 2: lanceolate, ca. as long as or slightly shorter than outer ones, 3-veined, apex acuminate. Lower sepal slightly curved, saccate, 2.5–3 cm deep, gradually narrowed into a hooked, incurved spur; spur ca. 1 cm, stout; mouth tip acute, 1–1.5 cm wide. Upper petal orbicular, ca. 1.2 cm in diam., apex cuspidate, midvein not thickened; lateral united petals not clawed, 2–2.5 cm, 2-lobed; basal lobes broadly oblong, apex obtuse; distal lobes oblong-dolabriform, ca. 2 × as large as basal ones, apex rounded; auricle large. Filaments linear, short; anthers obtuse. Ovary fusiform. Capsule linear-cylindric, 2–5 cm. Seeds few, brown, globose, ca. 2.5 mm in diam., smooth. Fl. Aug–Sep, fr. Oct.

- Forest understories, shaded moist places, roadsides; 1200–2100 m. W Yunnan.
The flowers are used medicinally for dissolving clots, promoting diuresis, and treating abdominal pain, postpartum blood stasis, carbuncles, and difficulty in urination.


林芝凤仙花 lin zhi feng xian hua

Plants annual, to 60 cm tall. Stem slender, simple, rarely shortly branched. Leaves alternate; petiole 1–1.5 cm; leaf blade linear-oblong or linear-lanceolate, rarely linear, 7–13 × 0.8–1.8 cm, membranous, often with 1 pair of purple stipitate glands at basal margin, glabrous, lateral veins 9–11 pairs, base gradually attenuate into petiole, margin sharply serrate, apex acute or long acuminate. Inflorescences axillary, 2-flowered; peduncles short, 2–3 mm. Pedicels slender, with 2 subulate-linear bracts at base; bracts persistent, broadly oblong, apex aristate. Flowers pale purple, large, to 4.5 cm deep. Lateral sepals 4; outer 2: subglobose, curved, 3-veined, apex aristate-acute; inner 2: linear, 1-veined, aristate. Lower sepal navicular, ca. 1.1 cm deep, gradually narrowed into an incurved spur. Upper petal orbicular, apex corneate-rostellate, abaxial midvein swollen at middle; lateral united petals ± clawed, 2-lobed; basal lobes ovate-oblong, apex rounded or emarginate, fibrously mucronulate; distal lobes broadly oblong, emarginate, mucronulate; auricle infolded, small. Anthers obvolute. Capsule linear. Fl. Jun–Jul.


荞麦地凤仙花 qiao mai di feng xian hua


Plants annual, 30–100 cm tall, glabrous. Stem erect, basally long naked. Leaves alternate; petiole long, 3–5 cm; leaf blade gray-white abaxially, dark green adaxially, ovate, ovate-lanceolate, or ovate-oblong, 10–15 × 4–6 cm, membranous, often with 1 or 2 pairs of stipitate basal glands, abaxially glabrous, adaxially sparsely white adpressed hairy, lateral veins 6 or 7 pairs, curving, midvein conspicuous abaxially, base broadly cuneate, attenuate into petiole, margin coarsely sharply serrate, teeth aristate, apex acuminate or caudate-acuminate. Inflorescences in terminal leaf axils, 2-flowered; peduncles shorter than leaves, 4–5 cm. Pedicels 1.5–2 cm, bracteate at base; bracts caducous, ovate-lanceolate, 5–6 mm, apex acuminate. Flowers white, 2.5–3 cm deep. Lateral sepals 2, broadly ovate-orbicular, ca. 7 × 5–6 mm, 6- or 7-veined, apex acuminate. Lower sepal broadly funneliform, 1–1.5 cm deep, gradually narrowed into an involute spur; spur pink spotted, 1–1.5 cm; mouth oblique, ca. 1 cm wide, tip acute. Upper petal suborbicular, ca. 1 × 0.6–0.7 cm, apex mucronulate, abaxial midvein thickened, cristate at middle; lateral united petals not clawed, 1.8–2 cm, 2-lobed; basal lobes orbicular; distal lobes oblong-dolabriliform; auricle infolded, reniform. Filaments linear, compressed, ca. 5 mm; anthers ovoid, apex acute. Ovary erect, fusiform. Capsule not seen. Fl. Aug–Sep.

● Forest understories, moist places; 2500–2700 m. E Xizang (Nyingchi).

95. Impatiens labordei J. D. Hooker, Hooker's Icon. Pl. 29: t. 2868. 1908.

芒萼凤仙花 mang e feng xian hua

Plants annual, ca. 20 cm tall, glabrous. Stem erect, simple. Leaves alternate in lower and middle parts of stem, petiolate but uppermost leaves sessile; petiole 1–2 cm; leaf blade lanceolate, 4–6 × 1.5–2 cm, rigidly papery, lateral veins 6–8 pairs, base gradually attenuate into petiole, margin spinose-serrate, apex long acuminate. Inflorescences 1-flowered; peduncles shorter than leaves, 2.5–3 cm. Pedicels bracteate at middle; bracts persistent, ovate-lanceolate, long acuminate. Flowers red-yellow, small, to 1.1 cm deep. Lateral sepals 2, ovate, apex acuminate, aristate, arista ca. as long as sepals, rigid, ca. 5 mm, 3-veined. Lower sepal navicular, ca. 1 cm deep, abruptly contracted into an incurved spur ca. 1.5 cm, tip acute, erect. Upper petal orbicular, ca. 8 mm in diam., base cordate, apex retuse, rostellate, abaxial midvein cristate; lateral united petals not clawed, ca. 1.2 cm, 2-lobed; basal lobes orbicular; distal lobes dolabriliform, longer, apex obtuse; auricle infolded. Filaments linear; anthers ovoid, apex acuminate. Ovary erect, fusiform. Capsule not seen. Fl. and fr. unknown.

● Guizhou (Pingba).


云南凤仙花 yun nan feng xian hua

Plants 20–30 cm tall, slender, glabrous. Stem erect, simple, basally long naked. Leaves alternate; petiole 1.5–2.5 cm; leaf blade ovate, 3 × 2–2.5 cm, lateral veins 5 or 6 pairs, base cuneate, attenuate into petiole, margin serrulate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, 1-flowered; peduncles 2–3 cm. Pedicels bracteate above middle; bracts linear-lanceolate, small, ca. 1.2 mm. Flowers yellow, ca. 1.5 cm wide. Lateral sepals 2, ovate or obliquely obovate-orbicular, 4–5 mm, inequilateral, 3-veined, apex cuspidate. Lower sepal navicular, ca. 1.1 cm deep, gradually narrowed into an incurved spur, then erect spur; spur ca. 2 cm, stout; mouth vertical, tip obtuse, mucronulate. Upper petal orbicular, ca. 1 cm in diam., apex retuse, abaxial midvein obtusely cornute below middle. Filaments linear; anthers acute. Capsule flexuose. Seeds 2, oblong, ca. 3 mm, tuberculate on one side. Fl. and fr. unknown.

● Sparse forests, along canals in valleys, moist places; ca. 1400 m. Guizhou.
Plants small, ca. 20 cm tall. Stem erect, slender, simple, basally long naked. Leaves few, alternate; petiole 5–10 mm; leaf blade gray-white abaxially, dark green adaxially, ovate, abaxially shortly strigose, adaxially glabrous, lateral veins 4 or 5 pairs, base acute, gradually attenuate into petiole, margin serrate, teeth mucronulate, apex subacute. Inflorescences axillary, 1-flowered; peduncles erect, shorter than leaves. Pedicels with 2 bracts at middle. Flowers yellow, large, 3–5 cm deep. Lateral sepals 2, orbicular, ca. 4 mm in diam., 5–7-veined, inequilateral. Lower sepal saccate, ca. 2 cm deep, gradually narrowed into an involute, short spur; mouth suboblique, ca. 2.5 cm wide, tip acute. Upper petal orbicular, ca. 1.2 cm in diam., abaxial midvein broadly cristate at middle; lateral united petals ± clawed, ca. 3 cm, 2-lobed; basal lobes orbicular, large; distal lobes dolabriiform or obovate-oblong, smaller, apex rounded; auricle present, small. Filaments short; anthers acute. Ovary curved. Capsule (immature) curved, oblong. Fl. and fr. Jul–Aug.

Shaded moist places on slopes. Yunnan (Binchuan).


Impatiens trigonosepala

Plants ca. 30 cm, slender, subglabrous, with few supporting roots, simple or shortly branched at middle, basally long naked. Leaves alternate, sparse; petiolo 2–4 cm; leaf blade pale green abaxially, green adaxially, 5–10 × 2–3 cm, membranous, with 1 pair of stipitate basal glands, lateral veins 5 or 6 pairs, fine, base cuneate, attenuate into petiole, margin coarsely crenate, apex shortly acuminate or acute. Inflorescences few, in upper leaf axils, 1-flowered; peduncles 3–5 cm, fibrous, glabrous or puberulent. Pedicels with lanceolate bracts at middle. Flowers pink, ca. 2.5 cm wide. Lateral sepals 2, triangular, ca. 6 × 3 mm, base truncate, apex mucronulate, abaxial midvein simple or carinate, green, glabrous or puberulent. Lower sepal navicular to funnelform, gradually narrowed into an incurved spur; spuri 2–3 cm, longer than limb; mouth vertical, tip acute. Upper petal orbicular or oblate, large, ca. 1.5 cm in diam., base cordate, apex retuse, abaxial midvein narrowly carinate or not; lateral united petals ± clawed, 1.4–1.6 cm, 2-lobed; basal lobes erect or curved, small, apex entire or 2-fid; distal lobes obovate or obcordate, very large, ca. 1 cm wide; auricle inflexed. Filaments short; anthers acute. Capsule (immature) linear, ca. 2 cm. Fl. Aug.

Shaded moist places by roadsides or canals; 1200–1300 m. E Sichuan.


Impatiens recurvicornis

Plants annual, 40–50 cm tall, slender, glabrous, laxly branched, or simple. Stem basally long naked. Leaves alternate; petiole 1–2 cm; leaf blade pale green abaxially, dark green adaxially, ovate-lanceolate or lanceolate, 5–8 × 2–2.5 cm, membranous, often with 2 basal glands, lateral veins 6–8 pairs, base acute, attenuate into petiole, margin crenate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, 1-flowered; peduncles spreading, 5–7 cm, slender. Pedicels bracteate above middle; bracts caducous, ovate, 3–4 mm, margin nearly entire or denticate, apex long aristate-acuminate. Flowers pink-purple, 3–4 cm deep. Lateral sepals 2, subovate, ca. 7 mm, margin inconspicuously denticate, apex acuminate, abaxial midvein thickened. Lower sepal navicular, 1.3–1.5 cm deep, gradually narrowed into an incurved spur; spuri 1.8 cm, slender; mouth oblique, tip acute. Upper petal orbicular, ca. 1.3 cm in diam., base deeply cordate, apex with a flat, stout rostellum (beak) ca. 5 mm, abaxial midvein thickened; lateral united petals ± clawed, 1.8–2 cm, 2-lobed; basal lobes oblong, small; distal lobes oblong, large, apex rounded; auricle inflexed. Filaments short, broad; anthers acuminate. Ovary erect, fusi-form. Capsule striate, narrowly linear, ca. 2.5 cm. Seeds few, brown, oblong, compressed, 3–5 mm, slightly rugose. Fl. Aug.

Moist places in valleys, grasslands along canals; 500–1200 m. W Hubei, Sichuan.

100. Impatiens cristata Wallich in Roxburgh, Fl. Ind. 2: 456. 1824.

Impatiens cristata

Plants annual, 30–80 cm tall, sparsely or densely pubescent. Stem erect, robust, branched. Leaves alternate; petiolo 1–2.5 cm, with 2 large globose basal glands; leaf blade lanceolate or ovate-lanceolate, 5–10 × 2–3.5 cm, both surfaces pubescent, lateral veins 9–11 pairs, base cuneate, attenuate into petiole, margin serrate, apex acuminate. Inflorescences short, (1 or)2–5-flowered; peduncles 5–15 mm. Pedicels slender, bracteate at middle; bracts setose or setose-lanceolate, pilose. Flowers golden-yellow, to 2.5 cm deep. Lateral sepals 2, orbicular, puberulent on veins, 5-veined. Lower sepal saccate, ± puberulent or with caducous hairs, abruptly narrowed into an incurved, short spur. Upper petal orbicular, abaxial midvein cristate; lateral united petals not clawed, 2-lobed; basal lobes orbicular; distal lobes oblong-dolabriiform; auricle inflexed, narrow. Anthers obtuse. Ovary fusiform, densely pubescent. Capsule linear, 2.5–3 cm, pilose. Fl. Jul–Sep.

Forest understoreys, along canals; 2000–3100 m. Xizang [Bhutan, NW India, Nepal].


Impatiens scabrida

Plants annual, 30–50 cm tall, rarely taller. Stem erect, green or purple-tinged basally, many branched, pubescent or subglabrous basally. Leaves alternate, sessile or sub sessile; petiolo with 2 globose basal glands; leaf blade ovate or ovate-lanceolate, 5–15 × 1.5–2 cm, apices of teeth with marginal glands, abaxially pubescent, adaxially sparsely strigose, lateral veins 7–9 pairs, base sub rounded, margin sharply serrate, apex acuminate. Inflorescences in leaf axils, 1–3-flowered, shortly pedunculate; pedicels bracteate at middle; peduncles, pedicels, and bracts brown pubescent; bracts persistent, setose

Plants 10–20 cm tall, slender, glabrous. Stem erect, simple or procumbent in lower part, long naked in lower part, remotely leaved. Leaves alternate; petiole 1–2 cm, slender; leaf blade pale green abaxially, dark green adaxially, ovate, 3–4 × 2–2.5 cm, membranous, lateral veins 3 or 4 pairs, base attenuate into petiole, margin coarsely crenate or crenate-serrate, teeth mucronulate, apex acuminate. Inflorescences 1-flowered; peduncles fibrous, 4–5 cm, 5–6 cm at fruiting. Pedicel bracteate below flower; bracts persistent, small. Flowers ?pink, ca. 2.5 cm wide. Lateral sepals 2, obliquely ovate, ca. 4 mm, inequilateral, base subcordate, hyaline margined, apex acutally mucronulate, abaxial midvein carinate or cristate. Lower sepal narrowly funnelform, ca. 2.5 cm deep, narrowed into an incurved spur; spur long, acute; mouth oblique, tip mucronulate. Upper petal orbicular, ca. 8 mm in diam., base cordate, apex retuse, abaxial midvein shortly cristate; lateral united petals shortly clawed, 1.1–1.5 cm, 2-lobed; basal lobes tetragonous, small; distal lobes broadly dolabridiform, very large, apically retuse; auricle conspicuous. Filaments linear, short; anthers obtuse. Ovary erect. Capsule (immature) linear, ca. 2.5 cm. Seeds ?many. Fl. Aug.

- Forest understories, moist places; 1900–2000 m. Chongqing (Chengkou).


Plants 15–20 cm tall, slender, glabrous. Stem erect, slender, simple. Leaves few, crowded at upper part of stem, alternate; petiole short, 1–1.5 cm, slender; leaf blade broadly ovate, 3.5–5 × 2.5–3 cm, thinly membranous, setose between teeth, 1- or 2-glandular-setose, abaxial fine, lateral veins 4 or 5 pairs, base rounded, attenuate into petiole, hyaline margined, margin crenulate, apex acute. Inflorescences axillary, 1-flowered; peduncles short, slightly longer than petioles, slender. Pedicel bracteate below flower; bracts linear-lanceolate. Flowers ?pink, ca. 2.5 cm deep. Lateral sepals 2, obliquely ovate, ca. 4 mm, reticulate veined, hyaline margined, apex obtuse. Lower sepal cornate, gradually narrowed into an incurved spur; spur ca. 3 cm, slender; mouth ca. 7 mm, tip cuspidate. Upper petal orbicular, ca. 9 mm in diam., base cordate, apex retuse, abaxial midvein shortly cristate; lateral united petals shortly clawed, 1.5–1.8 cm, 2-lobed; basal lobes very small; distal lobes broadly dolabridiform, very large, apically retuse; auricle conspicuous. Filaments linear, very short; anthers obtuse. Ovary erect. Capsule (immature) linear, ca. 2.5 cm. Seeds ?many. Fl. Aug.

- Forest understories, moist places; 1900–2000 m. Chongqing (Chengkou).
Plants annual, 20–40 cm. Stem procumbent, slender, branched, sparsely strigose in upper part, lower nodes slightly swollen, with many fibrous roots. Leaves alternate; petiole to 2 cm, strigose; leaf blade gray-green abaxially, dark green adaxially, ovate or ovate-elliptic, 2.5–6 × 1–3 cm, abaxially glabrous, adaxially strigose on veins, strigose-ciliate along margin, lateral veins 5–7 pairs, curved, base cuneate, margin sparsely serrate, apex acute or shortly acuminate. Inflorescences 1-flowered; peduncles 2–4 cm, strigose. Pedicels bracteate above middle; bracts persistent, lanceolate or linear-lanceolate, 3–5 mm, herbaceous. Flowers blue-purple. Lateral sepals 2, broadly ovate, ca. 5 × 3 mm, apex cuspidate. Lower sepals broadly ovate-lanceolate, rarely ovate-oblong, (1–)1.5–3 × 0.8–1.8 cm, membranous, often with 1 or 2 pairs of fibrous-stipitate glands at basal margin, abaxially sparsely pilose on veins, adaxially shiny, lateral veins 5 or 6 pairs, base gradually attenuate into petiole, margin crenate-serrulate, apex slightly acute or obtuse, mucronulate. Inflorescences in upper leaf axils, 1-flowered; peduncles often longer than leaves. Pedicels bracteate above middle; bracts persistent, linear-lanceolate, ca. 4 mm, pilose on midvein, apex long acuminate. Flowers purple, large, 3.4–4.4 cm deep. Lateral sepals 2, broadly ovate or ovate-orbicular, 4.5–3 × 3.5 mm, subleathery, sparsely pilose on midvein, 3-veined, base rounded or subcordate, apex reflexed, long mucronulate. Lower sepals purple striate, narrowly funnel-shaped, limb ca. 1.5 cm deep, narrowed into a curved, 2-fid spur ca. as long as limb. Upper petal suborbicular, ca. 1.1 × 1.4 cm, margin undulate, apex retuse, abaxial midvein cristate apically; lateral united petals ± clawed, 1.4–1.5 cm, 2-lobed; basal lobes orbicular; distal lobes broadly dolabridiform, ca. 2 × as long as basal lobes, apex rounded or obtuse; auricle inflexed. Filaments broadly linear; anthers acute. Ovary fusiform. Capsule linear, ca. 2.3 cm. Seeds 7 or 8, brown, subglobose, ca. 2 mm, smooth. Fl. Sep–Nov.

- Moist grasslands in valleys; 700–1500 m. Guizhou (Fanjing Shan).


Plants annual, 0.6–1 m. Stem prostrate or procumbent, sparsely strigose, with adventitious roots at nodes; branchlets erect or ascending, brown or purple-brown pubescent, densely so above. Leaves alternate; petiole 1–3 cm; leaf blade pale green abaxially, dark green adaxially, ovate or ovate-elliptic, 3–7 × 2–3.5 cm, membranous, with 2 or 3 pairs of stipitate glands at basal margin, abaxially pilose on veins, adaxially adpressed strigose, lateral veins 6 or 7 pairs, base broadly cuneate or sub-rounded, attenuate into petiole, margin crenate, teeth mucronulate, apex acute or shortly acuminate. Inflorescences in leaf axils of branchlets, 1-flowered. Pedicels 1.5–2.5 cm, slender, densely puberulent, bracteate at middle; bracts persistent, linear or subulate, very small, 1–2 mm. Flowers pink, large, 3.5–4 cm deep. Lateral sepals 2, broadly ovate, 8–10 × 5–6 mm, 6- or 7-veined, sparsely puberulent, apex mucronulate. Lower sepals broadly funnel-shaped, gradually narrowed into an incurved spur ca. 2 cm; mouth vertical, ca. 2 cm wide, tip acuminate. Upper petal suborbicular, 1.5–1.6 cm in diam., apex emarginate, midvein abaxially narrowly ciliate; lateral united petals ± clawed, ca. 1.7 cm, 2-lobed; basal lobes suborbicular; distal lobes broadly dolabridiform, large, apex rounded; auricle inflexed, lunar. Filaments linear, ca. 3 mm; anthers ovoid, apex acute. Ovary fusiform, ca. 3 mm. Capsule linear-cylindric. Seeds 5 or 6, brown, oblong-globose, 1.5–2.5 mm, smooth. Fl. Jun–Oct.

- Stony places on slopes; ca. 1300 m. Guangxi (Napo).

匍匐凤仙花 pu fu feng xian hua

Plants annual, ca. 20 cm, glabrous. Stem long prostrate basally, stout, simple. Leaves alternate; petiole 1–2 cm; leaf blade ovate or ovate-elliptic, 5–7 × 2.5–3.5 cm, lateral veins 6 or 7 pairs, base attenuate into petiole, margin crenate-serrate or serrate, apex acuminate. Inflorescences in upper leaf axils, 2- or 3-flowered; peduncles short, 1.5–2 cm. Pedicels 0.5–1 cm, bracteate at base; bracts persistent, ovate-lanceolate, small. Flowers yellow, to 2.5 cm deep. Lateral sepals 2, falcate-ovate, 3–5 mm, 3-veined, midvein apically stoutly mucronulate. Lower sepal subnavicular, limb ca. 1.5 cm deep, narrowed into an incurved spur; spur ca. 2 cm, acute or divaricate; mouth vertical, obtuse. Upper petal orbicular, ca. 1 cm in diam., base cuneate, margin crenate-serrate, apex acute. Lower sepal navicular, ca. 2 cm deep, narrowed into an erect spur; spur long, slender; mouth vertical, tip obtuse. Upper petal orbicular, large, ca. 1.3 × 1.5 cm, apex slightly retuse, mucronulate, abaxial midvein thickened; lateral united petals ca. 1.8 cm, 2-lobed; basal lobes red spotted, orbicular, 6–7 mm; distal lobes dolabiform, apically retuse; auricle inflexed, narrow. Filaments linear; anthers small, apex acute. Ovary erect, fusiform. Capsule linear, ca. 2 cm. Seeds few, ovoid-globose, ca. 2 mm. Fl. Aug–Sep.

- Grasslands at roadsides; 800–1000 m. Sichuan (Dujiang Yan, Emei Shan; Hongya).


平卧凤仙花 ping wo feng xian hua

Plants annual, flaccid, ca. 1 m or more, glabrous. Stem prostrate or procumbent, nodes with few roots; branches erect, 10–20 cm. Leaves alternate; petiole 0.5–1 cm; leaf blade pale green abaxially, dark green adaxially, ovate or ovate-lanceolate, 2–3 × 1–1.5 cm, lateral veins 5 or 6 pairs, base attenuate into petiole, margin serrulate, apex acuminate. Inflorescences in upper leaf axils, 1- or 2-flowered; peduncles shorter than or ca. as long as leaves. Pedicels 1–1.5 cm, slender, base or above middle with small bracts. Flowers golden-yellow, 1.5–2 cm. Lateral sepals obliquely ovate, subfalcate, 3–4 mm, thick, 3-veined, apex long cuspidate. Lower sepal navicular, limb ca. 1 cm deep, gradually narrowed into an incurved spur ca. 2 cm; mouth oblique, ca. 8 mm wide, tip acute. Upper petal orbicular, 8–10 mm in diam., apex retuse, abaxial midvein thickened, narrowly carinate; lateral united petals not clawed, ca. 1.7 cm, 2-lobed; basal lobes subtrigonal, apex retuse; distal lobes obovate-oblong, ca. 2 × as large as basal lobes, apically retuse; auricle inflexed. Filaments short; anthers acute. Ovary fusiform. Capsule (immature) linear, ca. 1 cm. Fl. Sep.

- Moist places by streams; 1700–2000 m. Yunnan (Dali, Songming, Yangbi).


菱叶凤仙花 ling ye feng xian hua

Plants annual, 20–30 cm tall, glabrous. Stem prostrate, simple. Leaves alternate, petiolate; leaf blade rhombic or sub-rhombic, 2–5 × 1.2–1.6 cm, glabrous, lateral veins 5 or 6 pairs, base cuneate, with stipitate glands, margin serrate, apex acuminate or acute. Inflorescences in upper leaf axils, often 2-flow-ered; peduncles 2–3 cm. Pedicels ca. 1 cm, slender, bracteate at base; bracts subulate, ca. 3 mm. Flowers yellow, ca. 1.5 cm wide. Lateral sepals 2, yellow-green, ovate-ornellar, small, apex acute. Lower sepal navicular, ca. 2 cm deep, narrowed into an erect spur; spur long, slender; mouth vertical, tip obtuse. Upper petal orbicular, large, ca. 1.3 × 1.5 cm, apex slightly retuse, mucronulate, abaxial midvein thickened; lateral united petals ca. 1.8 cm, 2-lobed; basal lobes red spotted, orbicular, 6–7 mm; distal lobes dolabiform, apically retuse; auricle inflexed, narrow. Filaments linear; anthers small, apex acute. Ovary erect, fusiform. Capsule linear, ca. 2 cm. Seeds few, ovoid-globose, ca. 2 mm. Fl. Aug–Sep.

- Along canals, shaded moist places at roadsides; 1100–1600 m. Chongqing (Chengkou, Wuxi).


膜叶凤仙花 mo ye feng xian hua

Plants 10–20 cm tall, slender, glabrous. Stem erect, simple, basally long naked. Leaves alternate; petiole 1–2 cm; leaf blade pale green abaxially, dark green adaxially, ovate or ovate-oblong, 4–8 × 2.5–3.5 cm, membranous, with 2 stipitate basal glands, lateral veins 6 or 7 pairs, base cuneate, attenuate into petiole, margin serrulate or crenate-mucronulate, apex acuminate. Inflorescences in leaf axils at apex of stem, 2–5-flowered; peduncles fibrous, ca. 2 cm. Pedicels short, bracteate at base; bracts linear-lanceolate, 3–4 mm, hyaline margined, midvein green. Flowers white, ca. 1 cm. Lateral sepals 2, ovate, ca. 3 mm, hyaline margined, apex acuminate. Lower sepal navicular, abruptly narrowed into a slender spur ca. 3 cm; mouth vertical, tip cuspidate, 4–5 mm. Upper petal orbicular, 4–5 mm in diam., apex retuse, rostellate, abaxial midvein thickened, cristate at middle; lateral united petals not clawed, ca. 8 mm, 2-lobed; basal lobes orbicular; distal lobes narrowly dolabiform, ca. 3 × as long as basal lobes, apically retuse; auricle inconspicuous. Filaments broadly linear; anthers small, apex acute. Ovary linear, ca. 9 mm. Capsule linear-lanceolate, ca. 9 mm. Seeds few, brown, oblong, 2–5 mm, tuberculate. Fl. Aug.

- Along roadsides; 100–200 m. Sichuan (Dujiang Yan, Emei Shan, Hongya).


羞怯凤仙花 xiu qie feng xian hua

Plants annual, small, ca. 20 cm tall, subglabrous except for peduncles. Stem erect, simple or branched from base, naked. Leaves alternate; petiole 2–4 cm, slender; leaf blade ovate or ovate-lanceolate, 3–5 mm, membranous, lateral veins 3–6 pairs, base cuneate, margin crenate-serrate, apex acute. Inflorescences 1–3-flowered; peduncles erect, 1–4 cm at fruiting, fibrous, pilose. Bracts very small, apice. Flowers pink, ca. 2.5 cm deep. Lateral sepals 2, broadly oblong, suborbicular, or cuculate, apex acute or mucronulate. Lower sepal funnelform, ca. 2.5 cm deep, narrowed into an incurved spur; spur ca. 2.5 cm, slender; mouth vertical, obtuse. Upper petal orbicular, ca. 1 cm in diam., apex rostellate, abaxial midvein carinate; lateral united petals
not clawed, ca. 2.5 cm, 2-lobed; basal lobes suborbicular or
tetragonal; distal lobes broadly dolabriform; auricle broad.
Filaments short, broad; anthers broadly ovoid, small. Ovary
Oct.

- Moist places on slopes; 1300–2200 m. Sichuan (Emei Shan).


单花凤仙花 dan hua feng xian hua

Plants annual, 8–50 cm tall. Stem erect, winged, upper part
often curved. Leaves alternate; petiole 0.3–2 cm; leaf blade
ovate or elliptic to lanceolate-elliptic, 1–10 × 1–5 cm, papery,
both surfaces strigose on veins, lateral veins 4 or 5 pairs curved,
base cuneate, margin serrate, teeth mucronulate, apex acute. In-
florescences axillary or terminal, 1(2)-flowered; peduncles
3–5 cm. Pedicels 1–1.5 cm, often sparsely strigose, 2-bracteate
at base; bracts ovate, 1–2 mm. Flowers pale red-purple or
white, pale purple spotted or yellow spotted. Lateral sepals
ovate or obliquely ovate, ca. 4 mm, apex ciliate-acute. Lower
sepal saccate, 2–2.5 cm deep, gradually narrowed into an
incurred spur ca. 1.5 cm; mouth vertical, 1.2–1.5 cm wide, tip
acute. Upper petal subreniform, ca. 9 mm, apex cuspidate,
abaxial midvein thickened, narrowly carinate; lateral united pet-
als not clawed, ca. 1.9 cm, 2-lobed; basal lobes oblong; distal
lobes oblong-dolabriform, larger, apex obtuse. Filaments com-
pressed, 4–5.5 mm; anthers ovoid, apex acute. Ovary fusiform,
ca. 3.5 mm. Capsule ca. 1.7 cm. Seeds many, brown, ellipsoid,
ca. 2.5 mm, granular. Fl. Jun–Oct.

- Understories of coniferous forests on mountain slopes, grass-
lands; 1600–3000 m. Taiwan.


翼萼凤仙花 yi e feng xian hua

Plants annual, 20–60 cm. Stem erect, slender, branched.
Leaves alternate; petiole 1.5–2 cm; leaf blade ovate or oblong-
ovate, 3–10 × 2.5–4 cm, with 2 globose basal glands, lateral
veins 5–7 pairs, base cuneate, margin crenate, apex acuminata.
Inflorescences axillary, 1-flowered; peduncles ca. 4 cm, with 1
lanceolate bract above middle. Flower pale purple or purple-
red. Lateral sepals 2, ovate, margin sometimes denticulate at
one side, apex acuminate, abaxial midvein narrowly carinate.
Lower sepal narrowly funneliform, base narrowed into an
incurred, slender spur. Upper petal orbicular, base cordate, apex
slightly emarginate, shortly rostellate, abaxial midvein thick-
ened, entire or undulate; lateral united petals ± clawed, 2-lobed;
basal lobes oblong; distal lobes broadly dolabriform, larger;

- Under stories of coniferous forests on mountain slopes, along
canals, shaded moist places; 1500–1700 m. Anhui, Guangxi, Henan, Hubei, Hunan, Shaanxi, Sichuan.


浙皖凤仙花 zhe wan feng xian hua

Plants annual, 30–60 cm tall, glabrous. Stem erect, laxly
branched. Leaves alternate; petiole 1.5–4 cm; leaf blade ob-
long-ovate, 7–13 × 3–6 cm, membranous, often with 1–3 pairs
of globose basal glands, lateral veins 5–7 pairs, base cuneate,
margin coarsely serrate, teeth mucronulate, apex acuminate.
Inflorescences in upper leaf axils, 1-flowered; peduncles erect,
2–3 cm. Pedics slender, bracteate above middle; bracts
persistent, lanceolate, ca. 2 mm. Flowers pale purple, 2.5–3.5
cm deep. Lateral sepals 2, ovate-orbicular, inequilateral, 6–7
mm, apex rounded, mucronulate, abaxial midvein thickened.
Lower sepal broadly funneliform, ca. 4.5 cm deep, gradually
narrowed into a slightly incurved spur ca. 3.5 cm; mouth ver-
tical, ca. 1.5 cm wide, tip acute. Upper petal broadly ovate, ca. 1
× 1.2 cm, base slightly cordate, apex obtuse, abaxial midvein
thickened; lateral united petals clawed, ca. 1.7 cm, 2-lobed;
basal lobes elliptic; distal lobes oblong; auricle inflexed, lunar.
Filaments linear, ca. 4 mm; anthers ovoid, apex acute. Ovary
linear, ca. 4 mm. Capsule linear-cylindric, 3–4 cm. Seeds many,

- Forest understories on slopes, moist places by streams; 1000–
1200 m. Anhui, Zhejiang.

118. Impatiens linocentra Handel-Mazzetti, Oesterr. Bot. Z.
82: 250. 1933.

秦岭凤仙花 qin ling feng xian hua

Plants annual, 30–60 cm tall, glabrous. Stem erect, slender,
long naked in lower part, branched in upper part. Leaves
alternate and petiolate, uppermost leaves subverticillate, shortly
petiolate or subsessile; petiole to 3 cm; leaf blade pale green
abaxially, green adaxially, ovate or ovate-elliptic, 6–9 × 2.5–4.5
cm, membranous, lateral veins 5 or 6 pairs, base cuneate, mar-
gin densely crenate-serrate, teeth mucronulate, apex shortly acu-
minate. Inflorescences in upper leaf axils, 1-flowered; pedun-
cles shorter than leaves, 4–6 cm. Pedicels ca. 4 cm, slender,
bracteate above middle; bracts persistent, ovate-lanceolate, 4–5
mm, leathery, apex acuminate. Flowers pink, becoming purple
when dry, 2.5–3 cm deep. Lateral sepals 2, lanceolate, 5–6 ×
2.5–3 mm, membranous, base dilated and denticulate, apex
mucronulate, abaxial midvein thickened, carinate. Lower sepal
funneliform, 2–2.5 cm deep, narrowed into a curved spur; spur
fibrous, 1–1.5 cm; mouth oblique, 7–8 mm, tip acute. Upper
petal cucullate, cordate, abaxial midvein broadly carinate; lat-
eral united petals not clawed, 0.7–2 cm, 2-lobed; basal lobes
ovate; distal lobes broadly and obliquely ovate-orbicular, ca. 2
× as long as basal lobes; auricle orbicular. Filaments linear;
anthers acute. Ovary fusiform, ca. 3 mm. Capsule linear, 2.5–
3 cm. Seeds few, brown, oblong, 3–4 mm, smooth. Fl. Aug,

- Forest margins, shaded moist places in valleys; 800–1800 m.
Henan, Shaanxi.

88. 1999.

中州凤仙花 zhong zhou feng xian hua

Plants annual, 40–60 cm tall, glabrous or subglabrous.
Stem erect, green or becoming purple in lower part, branched, sparsely glandular in upper part, below nodes dilated. Leaves alternate; petiole short, 5–15 mm; leaf blade sometimes becoming purple abaxially, ovate or elliptic-ovate, 8–15 × 2.5–6.5 cm, with 1 or 2 pairs of basal glands, midvein and lateral veins abaxially prominent, lateral veins 7–11 pairs, base broadly cuneate or subrounded, margin serrate, teeth mucronulate, apex acuminate or caudate-acuminate. Inflorescences in upper leaf axils, 2– or 3-flowered; peduncles conspicuously shorter than leaves. Pedicels 0.5–1.5 cm, slender, slightly elongate at fruiting, bracteate above middle; bracts persistent, recurved, ovate or ovate-lanceolate, 4–5 mm, 3–5-veined, apex acute. Flowers pink-purple, 2–2.5 cm. Lateral sepals 2, obliquely ovate or ovate, 7–8 × 3–4 mm, abaxial midvein narrowly winged, rostellate. Lower sepal saccate, 2.5–3 cm; mouth oblique, ca. 1.5 cm wide, tip acute, base abruptly narrowed into a recurved, 2-lobed spur 6–7 mm. Upper petal suborbicular, 7–8 mm in diam., apex acute, rostellate, abaxial midvein thickened. Lower sepal navicular, ca. 1.5 cm deep, narrowed into a slightly incurved spur; spur stout, obtuse; mouth oblique, tip acute. Upper petal orbicular, ca. 1.4 cm in diam., base retuse, apex rounded, rostellate, abaxial midvein thickened, broadly carinate; lateral united petals not clawed, 2–2.5 cm, 2-lobed; basal lobes purple along margin, orbicular or crved, small; distal lobes dolabridform, larger, apically often retuse; auricle linear, elongate, inserted into spur. Filaments short, broad; anthers ovoid, apex acute. Ovary erect, fusiform. Capsule erect or curved, linear, 3–4 cm. Seeds many, brown, ovoid-oblong, 3.5–4 mm, glabrous. Fl. Aug–Sep.

**Forest margins, shaded moist places in valleys; 1200–1500 m. Henan, S Shanxi.**

120. Impatiens imbecilla J. D. Hooker, Hooker’s Icon. Pl. 30: t. 2917. 1910.

纤袅凤仙花  xian niao feng xian hua

Plants annual, (20–)40–60 cm tall, with few supporting roots, glabrous. Stem erect, slender; branchlets spreading, slender. Leaves alternate; petiole 2–4 cm, without basal glands; leaf blade gray-green abaxially, dark green adaxially, ovate or ovate-lanceolate, (3–)5–11 × 2.5–4 cm, membranous, abaxially glabrous, adaxially apressed strigose, lateral veins 4–7 pairs, base cuneate, attenuate into petiole, margin coarsely crenate-serrate, teeth scarcely mucronulate, apex acuminate or caudate-acuminate. Inflorescences in upper leaf axils, 2–3-flowered; peduncles subequal to leaves, 2–3 cm, slender. Pedicels 1–1.5 cm, slender, bracteate at base or below middle; bracts caducous, ovate-lanceolate, 3–5 mm, pedicels and bracts puberulent. Flowers pink, medium-sized or small, 1.5–2 cm deep. Lateral sepals 2, ovate-orbicular, ca. 4 × 1.5–2 mm, apex acuminate. Lower sepal navicular-cominate, 1.2–1.5 cm deep, gradually narrowed into an erect or curved spur; mouth oblique, tip acuminate. Upper petal orbicular, 7–8 mm in diam., apex retuse, rostellate, abaxial midvein thickened, cristate; lateral united petals not clawed, 2-lobed; basal lobes spotted, orbicular or subtriangular; distal lobes dolabridform, longer, apex rounded; auricle linear, elongate, inserted into spur. Filaments linear; anthers acute. Ovary linear, ca. 3 mm. Capsule linear, 2.5–3 cm. Fl. Aug–Sep.

**Forest margins on slopes, moist places at roadsides; 1200–2000 m. Sichuan (Ebian, Emei Shan, Hongya).**


散生凤仙花  san sheng feng xian hua

Plants annual, 20–60 cm tall, subglabrous. Stem erect, slender; branchlets spreading. Leaves alternate; petiole 3–4 cm, without basal glands; leaf blade pale green abaxially, green adaxially, ovate-oblong, membranous, glabrous, lateral veins 6 or 7 pairs, fine, base rounded, or cuneate and attenuate into petiole, margin crenate or crenate-serrate, apex acuminate. Inflorescences in upper leaf axils, 2-flowered; peduncles 2–3 cm, slender, glabrous or puberulent. Pedicels short, 0.3–3 cm, elongate at fruiting, bracteate at base or above; bracts persistent, lanceolate, 3–5 mm. Flowers pink-purple, small, to 2 cm. Lateral sepals 2, ovate, ca. 7 mm, glabrous or puberulent, 3-veined, apex acuminate, mucronulate. Lower sepal navicular, ca. 1.5 cm deep, narrowed into a slightly incurved spur; spur stout, obtuse; mouth oblique, tip acute. Upper petal orbicular, ca. 1.4 cm in diam., base retuse, apex rounded, rostellate, abaxial midvein thickened, broadly carinate; lateral united petals not clawed, 2–2.5 cm, 2-lobed; basal lobes purple along margin, orbicular or crved, small; distal lobes dolabridform, larger, apically often retuse; auricle linear, elongate, inserted into spur. Filaments short, broad; anthers ovoid, apex acute. Ovary erect, fusiform. Capsule erect or curved, linear, 3–4 cm. Seeds many, brown, ovoid-oblong, 3.5–4 mm, glabrous. Fl. Aug–Sep.

**Forest margins on slopes, moist places at roadsides; 1300–2000 m. Sichuan (Emei Shan).**


华丽凤仙花  hua li feng xian hua

Plants annual, 60–70 cm tall, subglabrous. Stem erect, branched. Leaves alternate, sessile or shortly petiolate; petiole 2–4 cm, without basal glands; leaf blade pale green abaxially, green adaxially, broadly ovate-lanceolate or elliptic, 5–15 × 2.5–4.5 cm, rigidly papery, lateral veins 5–8 pairs, base gradually attenuate into petiole, margin serrate or crenate-serrate, apex acuminate. Inflorescences in upper leaf axils, 2-flowered; peduncles erect, 5–10 cm, slender, glabrous or puberulent. Pedicels 1–2 cm, slightly elongate at fruiting, bracteate at base; bracts caducous, lanceolate, 2–3 mm. Flowers purple-red, large, ca. 3 × 2 cm. Lateral sepals 2, green, ovate, 6–8 mm, 3–5-veined, apex acuminate, abaxial midvein thickened. Lower sepal corneous, 3–4 cm deep, narrowed into an incurved or erect spur; mouth oblique, tip mucronulate. Upper petal orbicular, 1.3–1.7 cm wide, base deeply cordate, apex retuse, abaxial midvein thickened, carinate, sometimes with a small sac or cornute; lateral united petals not clawed, 2–2.5 cm, 2-lobed; basal lobes orbicular; distal lobes dolabridform, large; auricle linear, elongate, inserted into spur. Filaments very short, broad; anthers acute. Ovary erect, fusiform. Capsule striate, linear, 2.5–3 cm. Seeds many, brown, oblong, ca. 4 mm, smooth. Fl. Aug–Sep.

**Forest margins on slopes, moist places at roadsides; 1300–2100 m. Sichuan (Emei Shan).**


小穗凤仙花  xiao sui feng xian hua
Plants annual, 30–60 cm tall, slender. Stem erect, laxly branched. Leaves alternate; petiole short, 0.5–1.5 cm, basal glands absent; leaf blade pale green abaxially, dark green adaxially, ovate or ovate-oblong, 4–8 cm, rigid, without or with 1–3 basal glands, lateral veins 6 or 7 pairs, base acute, margin crenate or crenate-serrate, apex acute. Inflorescences in upper leaf axils, 3–5-flowered; peduncles spreading or curved, ca. as long as leaves, fibrous. Pedicels 0.5–1 cm, elongate at fruiting, bracteate at base; bracts very small, setose. Flowers spreading, yellowish, small, ca. 1 cm deep. Lateral sepals 2, ovate-orbicular, 3–4 mm, membranous, 5-veined, apex obtuse. Lower sepal funnelform, 1.3–1.5 cm deep, gradually narrowed into an incurved spur ca. 3 × as long as limb; mouth vertical, tip acute. Upper petal orbicular, ca. 6 mm in diam., base cordate, apex retuse, abaxial midvein fine, not thickened; lateral united petals not clawed, ca. 5 mm, 2-lobed; basal lobes orbicular; distal lobes small; auricle absent. Filaments linear; anthers acute. Ovary erect, fusiform. Capsule erect or slightly curved, linear, ca. 2 cm. Seeds 5, brown, elliptic, 3.5–5 mm, glabrous, shiny. Fl. Aug–Sep.

• Forest understories on slopes, thickets, shaded moist places, roadsides; 2000–2500 m. Sichuan (Emei Shan, Hongya).


侧穗凤仙花 ce sui feng xian hua

Plants annual, 0.4–1 m tall, glabrous. Stem many-branched. Leaves alternate, sessile or shortly petiolate; leaf blade broadly lanceolate, 5–15 × ca. 6 cm, with stipitate basal glands, both surfaces sparsely hairy, lateral veins 6–8 pairs, base acuminate, margin serrate, apex caudate. Inflorescences axillary, racemose, 3–6-flowered, often 5-flowered; peduncles 10–20 cm. Pedicels 1.4–2 cm, elongate at fruiting, bracteate at base; bracts subulate, ca. 2 mm. Flowers red, pale red, or white, ca. 3 cm deep, 1.4–2 cm wide. Lateral sepals 2, subulate, ca. 2 mm, 3-veined. Lower sepal navicular-cornute, 2.5–3 cm deep, narrowed into an erect, stout spur; mouth oblique, ca. 1.4 cm wide. Upper petal suborbicular, 1.5–1.8 cm wide, base deeply cordate, apex obtusely cuspitate, abaxial midvein thickened, narrowly carinate, with 2 cristae; lateral united petals ± clawed, 2.5–3 cm, 2-lobed; basal lobes orbicular; distal lobes dolabriform, larger, apically often retuse; auricle linear, 1–1.3 cm, inserted into spur. Filaments short, compressed; anthers acute. Ovary clavate. Capsule ca. 3 cm. Seeds 5–7, black, ovoid-orbicular, ca. 3 × 2 mm. Fl. Aug-Sep.

• Forest margins on slopes; 2000–2500 m. Sichuan (Ebian, Emei Shan).


林生凤仙花 lin sheng feng xian hua

Plants annual, 30–90 cm tall, glabrous. Stem erect, stout, basally long noded, laxly branched. Leaves alternate, often crowded at apex; petiole 1–2 cm, slender; leaf blade pale green abaxially, dark green adaxially, ovate, 5–10 × 2.5–4 cm, thinly membranous, often with 2 stipitate basal glands, lateral veins 6–8 pairs, fine, base cuneate, margin coarsely crenate, apex acute.

Inflorescences in upper leaf axils, 1–3-flowered; peduncles shorter than petioles at anthesis, fibrous, 2- or 3-divaricate. Pedicels short, bracteate at base; bracts persistent, linear, very small. Flowers yellow, small. Lateral sepals 2, ovate-cordate, 3–4 mm, 3-veined, apex glandular. Lower sepal narrowly funnelform, ca. 2 cm deep, with an incurred spur; mouth oblique, tip acute. Upper petal oblate, ca. 8 mm in diam., base cordate, apex retuse, recurved-mucronulate, abaxial midvein with a small sac at middle; lateral united petals not clawed, ca. 3 mm, 2-lobed; basal lobes orbicular; distal lobes ca. 2 × as large as basal lobes, obovate; auricle denticulate. Filaments short, broad; anthers acute. Ovary erect, 5-striate. Capsule (immatuer) linear. Fl. Aug–Sep.

• Along canals, shaded moist places; 800–2800 m. Sichuan (Emei Shan).

126. Impatiens piufanensis J. D. Hooker, Hooker’s Icon. Pl. 29: t. 2869. 1908.

块节凤仙花 kuai jie feng xian hua

Plants annual, 20–40 cm tall. Stem erect, basally procumbent, slender, laxly white tomentose in upper part, nodes swollen, with globose tuber and adventitious roots. Leaves alternate; petiole 0.3–2 cm; leaf blade ovate or ovate-lanceolate, 3–6 × 1.5–2.5 cm, spinose on veins, lateral veins 4 or 5 pairs, base cuneate, margin coarsely serrate, teeth mucronulate, apex acuminate. Inflorescences axillary, 1-flowered; peduncles 4–5 cm. Pedicels bracteate at base (but appears as though above middle); bracts narrowly lanceolate. Flower red, medium-sized, ca. 3 cm deep. Lateral sepals 2, elliptic, ca. 5 mm, apex rostellate. Lower sepal funnelform, ca. 2.5 cm deep, narrowed into a curved, slender spur ca. as long as limb. Upper petal orbicular or obovate, apex mucronulate, abaxial midvein carinate; lateral united petals 2-lobed; basal lobes orbicular, apex obtuse; distal lobes dolabriform, apex rounded. Anthers acute. Capsule striate, linear. Seeds brown, subglobose, ca. 3 mm, smooth. Fl. Jun–Aug, fr. Jul–Oct.

• Forest understories, along canals, moist places; 900–2000 m. Chongqing (Nanchuan), Guizhou.


柳叶状凤仙花 liu ye zhuang feng xian hua

Plants annual, 30–45 cm tall, slender. Stem erect, upper part and peduncles brown pilose, striate, simple or rarely branched, base often swollen. Leaves alternate, shortly petiolate. Leaves in middle part of stem with petiole ca. 5 mm; leaf blade narrowly oblong, 5–8.5 cm, with 3 or 4 pairs of stipitate glands at basal margin, abaxially brown pilose, lateral veins 7 pairs, base gradually attenuate into petiole, margin serrulate, apex acuminate. Blade of upper leaves linear or linear-lanceolate, 7–11 × 0.5–1.2 cm, margin inconspicuously serrulate, apex long acuminate. Inflorescences axillary, usually (1 or)2-flowered; peduncles often shorter than leaves. Pedicels 1–2 cm, bracteate at base or basally; bracts lanceolate, 3–4 mm, sparsely brown pilose, apex acuminate. Flowers pink, large, to 4 cm deep. Lateral sepals 2, ovate or oblong-ovate, 5–6 mm, many veined, apex mucronulate, abaxial midvein pilose. Lower sepal striate, broadly funnelform, 1.5–1.7 cm deep, narrowed into an
incurred, 2-fid spur 1–1.2 cm. Upper petal obovate-orbicular or suborbicular, 1.2–1.5 cm in diam., apex emarginate, long rostellate, abaxial midvein thickened, cristate above middle, sparsely pilose; lateral united petals ± clawed, 1.8–2.5 cm; basal lobes orbicular, apex mucronulate; distal lobes dolabriform, ca. 2 × as long as basal lobes, apex obtuse or rounded; auricle inflexed, rounded. Filaments linear, short; anthers acute. Ovary fusiform. Capsule (immature) linear, ca. 7 mm. Seeds unknown. Fl. Jul.–Aug.

- Riversides; 1000–2500 m. S. Sichuan.


红娃凤仙花  hong zhi feng xian hua

Plants annual, 20–40 cm tall, glabrous. Stem erect, simple. Leaves alternate, shortly petiolate or upper leaves subsessile; petiole 1.5–3 cm; leaf blade pale green abaxially, dark green adaxially, ovate or ovate-lanceolate, 6–8 × 3.5–4 cm, membranous, without glands or with few ciliate glands at base, lateral veins 4 or 5 pairs, base cuneate, attenuate into petiole, margin coarsely serrate, teeth mucronulate, apex acute or acuminate. Inflorescences in upper leaf axils, 2- or 3-flowered; peduncles longer than petioles, slender. Pedicels 1–1.5 cm, bracteate at base (but appearing as if at middle in upper flowers); bracts ovate, 2–5 mm, apex cuspidate. Flowers red or purplish red, large, 2–2.5 cm. Lateral sepals 2, orbicular or elliptic, 5–6 × 3–4 mm, 5-veined, apex long mucronate. Lower sepal sub-saccate-funnelform, ca. 2.5 cm deep, narrowed into an incurved spur; spur red striate, shorter than limb; mouth oblique, ca. 1.5 cm wide, tip acute. Upper petal orbicular, ca. 1.5 cm in diam., apex curved, long mucronulate, abaxial midvein thickened, carinate; lateral united petals not clawed, 2–2.5 cm, 2-lobed; basal lobes orbicular; distal lobes curved, narrowly dolabriform or falcate, longer, apex obtuse (or ?mucronate); auricle inflexed, narrow. Filaments subulate, short; anthers ovoid, apex acute. Ovary erect, fusiform. Capsule linear, ca. 1.5 cm. Fl. Sep.

- Forest margins on slopes, shaded moist places at roadsides; 1900–2200 m. W. Hubei (Changyang), Sichuan.


滇西凤仙花  dian xi feng xian hua

Plants annual, 35–90 cm tall. Stem erect, long naked in lower part, leafy in upper part, glabrous, simple or rarely branched and branchlets slender. Leaves alternate; petiole 1–2 cm, glabrous; leaf blade pale green abaxially, dark green adaxially, ovate-lanceolate or subelliptic, 10–15 × 3–5 cm, membranous, abaxially glabrous, adaxially adpressed strigose, lateral veins 8 or 9 pairs, curved, abaxially prominent, base broadly cuneate, margin regularly serrate, teeth glandular mucronulate, apex acuminate. Inflorescences in upper leaf axils, 2(or 3)-flowered; peduncles erect or slightly curved, ca. as long as leaves or shorter. Pedicels 1–2 cm, bracteate at base (but appearing as if at middle in upper flowers); bracts persistent, ovate-lanceolate, 3–4 mm, setose, apex glandular mucronulate. Flowers purple-red, spotted and striate, 3–3.5 cm deep. Lateral sepals 2, obliquely ovate or suborbicular, 8–9 × 5–6 mm, reticulate veined, apex mucronulate, abaxial midvein not thickened. Lower sepal saccate, ca. 3 cm deep, abruptly narrowed into an incurved spur ca. 1 cm; mouth oblique, ca. 1.8 cm wide, tip acute. Upper petal reniform, 1.8–2 × ca. 2 cm, apex cornute, abaxial midvein thickened, conspicuously carinate; lateral united petals shortly clawed, ca. 3.5 cm, 2-lobed; basal lobes suborbicular, ca. 1.4 cm in diam.; distal lobes falcate-flabellate, ca. 2 × as long as basal lobes, apex obtuse; auricle small. Filaments linear, 3–4 mm; anthers ovoid, apex acute. Ovary linear. Capsule not seen. Fl. Aug.

- Shaded moist places in valleys or by streams; ca. 2600 m. SW Sichuan, NW Yunnan [N. Myanmar].


丁香色凤仙花  ding xiang se feng xian hua

Plants perennial, 30–60 cm tall, glabrous. Stem robust, branched. Leaves alternate, subsessile; leaf blade pale green abaxially, dark green adaxially, ovate or ovate-lanceolate, 5–7 × 2.5–3 cm, rigid, lateral veins 6 or 7 pairs, base cuneate, attenuate into petiole, margin serrate, teeth mucronulate, apex shortly acuminate. Inflorescences in upper leaf axils, 1- or 2-flowered; peduncles fibrous, ca. as long as leaves. Pedicels 1 cm, slender, bracteate at base (but appearing as if at middle in upper flowers); bracts persistent, lanceolate, very small. Flowers pale violet or purple-violet, 3–5 cm. Lateral sepals 2, ovate-falcate, ca. 7 mm, 5-veined, inequilateral, apex acuminate. Lower sepal funnelform, ca. 2 cm deep, gradually narrowed into an incurved spur; mouth vertical, ca. 1.5 cm, tip cuspidate. Upper petal orbicular, ca. 1.3 cm in diam., abaxial midvein thickened, with stout, ascending horn at upper middle; lateral united petals ± clawed, ca. 2.5 cm, 2-lobed; basal lobes broadly orbicular; distal lobes recurved, narrowly dolabriform, longer; auricle rounded. Filaments linear, short; anthers ovoid, apex acuminate. Ovary erect, fusiform. Capsule striate, fusiform, ca. 1.4 cm. Seeds few, dark brown, subglobose, ca. 3.5 mm in diam., tuberculate. Fl. and fr. unknown.

- Mountain forests; ca. 1900 m. Yunnan (Yanjin).

131. *Impatiens meyana* J. D. Hooker, Hooker's Icon. Pl. 30: t. 2958. 1911.

梅氏凤仙花  mei shi feng xian hua

Plants annual, 30–90 cm tall, glabrous. Stem erect, slender, naked in lower part, branched in upper part. Leaves alternate; petiole long, 2–3 cm; leaf blade gray-green abaxially, dark green adaxially, ovate or ovate-lanceolate, 3–7(–9) × 2–4 cm, membranous, lateral veins 6–8 pairs, curved, abaxially glabrous, adaxially adpressed strigose, base cuneate, attenuate into petiole, margin crenate or serrate, teeth glandular-mucronulate, apex subcaudate-acuminate. Inflorescences in upper leaf axils, 2-flowered; peduncles erect or slightly spreading, longer than or ca. equal to leaves, 4–7 cm, slender. Pedicels fibrous, 1–1.5 cm, slightly elongate at fruiting, bracteate at base (but appearing as if at middle in upper flowers); bracts caducous, ovate-lanceolate or lanceolate, 3–5 mm, midvein puberulent, apex long acuminate. Flowers yellow, 2–2.5 cm deep. Lateral sepals 2, ovate, 5–
6 mm, 6- or 7-veined, apex mucronulate, abaxial midvein fine, not thickened. Lower sepal navicular, 0.8–1 cm, abruptly narrowed into an incurved spur ca. 2 × as long as limb; mouth vertical, 0.8–1 cm wide, tip acute. Upper petal subtetragonuous-ornicular, 0.8–1 cm in diam., base cordate, apex retuse, rostellate, abaxial midvein thickened, narrowly carinate; lateral united petals not clawed, 1–1.5 cm, 2-lobed; basal lobes ornicular; distal lobes oblong-dolabiform, longer, apex rounded; auricle rounded. Filaments broadly linear, 3–4 mm; anthers ovoid, apex acute. Ovary erect, fusiform. Capsule linear, 2–3 cm. Seeds many, brown, ornicular, compressed, ca. 3 mm, smooth. Fl. Jul–Aug.

- Moist places at roadsides; 2200–3000 m. Yunnan.


齿叶凤仙花 chi ye feng xian hua

Plants annual, 10–25 cm, glabrous. Stem erect, simple, often naked in lower part, laxly leafy in upper part. Leaves alternate; petiole 0.5–2.5 cm, slender; blade gray-green abaxially, green adaxially, ovate or ovate-lanceolate, (3–)5–9 × 3–4 cm, thinly membranous, without or with glandular hairs at base, lateral veins 6 or 7 pairs, base cuneate, attenuate into petiole, margin coarsely serrate, teeth mucronulate, apex acute or acuminate. Inflorescences in upper leaf axils, 1-flowered; peduncles shorter than leaves, 2.5 cm. Pedicels 1.5–2 cm, slender, bracteate above middle; bracts persistent, linear-lanceolate, minute, 1–2 mm. Flowers pink, purple spotted, to 2 cm. Lower sepals 2, ovate-lanceolate, ca. 5 mm, membranous, 3-veined, base inequilateral, apex long acuminate. Lower sepal red striate, funnelform, ca. 2 cm deep, narrowed into an incurved, short spur; mouth vertical, ca. 1.3 cm wide, tip acute. Upper petal white, ca. 1.2 cm in diam., apex retuse, abaxial midvein fine, apically slightly thickened; lateral united petals narrowly clawed, ca. 1.8 cm, 2-lobed; basal lobes ornicular, apically 2-lobed; distal lobes oblong, ca. 2 × as long as basal lobes, apex rounded; auricle inflexed, narrowly carinate. Filaments broadly linear, very short; anthers acute. Ovary erect, fusiform, 2–3 mm, puberulent. Capsule not seen. Fl. Aug.

- Dense forests, along canals; 1900–2800 m. Yunnan (Dongchuan, Zhenxiong).


细圆齿凤仙花 xi yuan chi feng xian hua

Plants annual. Branchlets slender, glabrous. Leaves alternate; petiole 1–2 cm; leaf blade ovate, 5–8 × 2.5–3.5 cm, with stipitate basal glands or not, setose, lateral veins 6–8 pairs, base abruptly attenuate into petiole, margin crenate, apex acuminate. Inflorescences in upper leaf axils, 3- or 4-flowered; peduncles ca. as long as petals. Pedicels 5–6 mm, slender, bracteate at base; bracts lanceolate, 3–4 mm, membranous, apex acuminate. Flowers yellow, small, 1–1.5 cm deep. Lateral sepals 2, ornicular, ca. 5 mm in diam., 5–7-veined, midvein abaxially cupulidate. Lower sepal navicular, ca. 1.1 cm deep, base gradually narrowed into an involute spur; spur ca. 2 × as long as limb, stout; mouth vertical, tip acute. Upper petal reflexed, ornicular, apex obtuse or acute, abaxial midvein thickened, crispatate at middle; lateral united petals not clawed, short, 2-lobed; basal lobes ornicular; distal lobes incurved, ornicular; auricle inflexed. Filaments linear, short; anthers acute. Capsule not seen. Fl. Aug.

- Grasslands on slopes; 1900–2400 m. Chongqing (Chengkou, Wushan).


心萼凤仙花 xin e feng xian hua

Plants annual, 30–80 cm tall, glabrous, with few supporting roots. Stem erect, long naked in lower part, branched in upper part; branchlets spreading, slender. Leaves alternate, petiolate; upper leaves subsessile; petiole 2–3.5 cm; leaf blade pale green abaxially, dark green adaxially, ovate or ovate-oblong, 4–12 × 2.5–5.5 cm, membranous, lateral veins 2–4 pairs, base broadly cuneate, gradually attenuate into petiole, margin crenate, teeth mucronulate, apex caudate. Inflorescences in upper leaf axils, 3–5-flowered; peduncles shorter than petals, 2–3 cm. Pedicels 5–7 mm, bracteate at base; bracts persistent, ovate, 2–3 × ca. 1.5 mm, membranous. Flowers yellowish, 1.5–2 cm deep. Lateral sepals 2, broadly ovate or subcordate, ca. 4 × 3–4 mm, 5-veined, apex mucronulate. Lower sepal navicular, ca. 5
mm deep, gradually narrowed into an incurved or involute spur; spur 1.4–1.5(–2) cm, slender; mouth oblique, ca. 1 cm wide, tip acute. Upper petal broadly cordate, 5–6 mm, apex mucronulate, abaxial midvein triangular crista; lateral united petals not clawed, 1.5–1.6 cm, 2-lobed; basal lobes suborbicular; distal lobes dolabriliform, ca. 2 × as long as basal lobes, apex obtuse; auricle inflexed. Filaments linear, ca. 3 mm; anthers broadly ovoid, apex acute. Ovary erect, fusiform. Capsule linear, ca. 1.5 cm. Seeds few, oblong. Fl. Aug.

- Forest understories, shaded moist places on slopes, along canals; 1200–2000 m. NW Hubei.


陇南凤仙花  long nan feng xian hua

?Impatiens potaninii f. rubrobrunnea E. Pritzel.

Plants annual, 30–60 cm tall. Stem erect, branched in upper part. Leaves alternate, shortly petiolate, upper leaves sessile; leaf blade ovate or oblong, 5–10 × 3–4.5 cm, with few glandular hairs at base (?with few stipitate glands), base broadly cuneate, margin obtusely crenate-serrate, apex acute. Inflorescences axillary, 2- or 3-flowered; peduncles short, 1–2 cm. Leaves alternate, shortly petiolate, upper leaves sessile; petiole 5–15 mm; leaf blade pale green abaxially, dark green adaxially, ovate-lanceolate, midvein narrowly carinate; lateral united petals ca. 1.5 cm, 2-lobed; basal lobes obovate-oblong; distal lobes broadly dolabriliform, larger. Filaments flattened; anthers acute. Capsule linear, ca. 1.5 cm. Fl. Aug.–Oct.

- Forest margins, shaded moist places in valleys, along canals; 1200–2300 m. Gansu, Shaanxi, Sichuan.


美丽凤仙花  mei li feng xian hua

Plants annual, 30–40 cm tall, glabrous. Stem erect, branched in lower part; branches and branchlets erect and slender. Leaves alternate, subsessile or shortly petiolate; petiole 5–15 mm; leaf blade pale green abaxially, dark green adaxially, ovate-lanceolate, 3–7 × 2.5–3 cm, membranous, glabrous, lateral veins 4–7 pairs, base attenuate into petiole, margin crenate or crenate-serrate, apex acute. Inflorescences in upper leaf axils, 1–3-flowered; peduncles longer than petioles, 0.5–1 cm. Pedicels short, 0.5–1 cm, bracteate at middle or below; bracts persistent, ovate, ca. 2 mm, membranous. Flowers yellowish, 1.5–2 cm deep. Lower sepals 2, tetragonal, 4–5 mm, 2–5-veined, midvein fine, apex mucronulate. Lower sepals navicular, ca. 1.3 cm deep, narrowly into an incurved spur longer than upper. Upper petal orbicular, ca. 5 mm in diam., hooked at basal margin, abaxial midvein thickened, obtusely rostellate at middle; lateral united petals clawed, ca. 2 cm, 2-lobed; basal lobes orbicular, small, thicker; distal lobes broadly dolabriliform, apically retuse; auricle conspicuous. Filaments linear; anthers acute. Ovary erect, fusiform, apex acuminate. Capsule (immature) linear, 1–1.2 cm. Fl. Sep.

- Stony streamsides; 1400–1600 m. Chongqing (Chengkou).


川鄂凤仙花  chuan e feng xian hua

Plants annual, 30–40 cm tall, glabrous. Stem erect; branches and branchlets spreading. Leaves often crowded at apex of stem, alternate; petiole 2–7 mm; leaf blade pale green abaxially, dark green adaxially, ovate, ovate-lanceolate, or oblong, 5–10 × 2–3 cm, membranous, lateral veins 7 or 8 pairs, fine, base acute, abruptly attenuate into petiole, margin crenulate or crenate-serrate, apex acute or acuminate. Inflorescences 2–4-flowered; peduncles 3–6 cm, very slender. Pedicels 1–1.5 cm, fibrous, bracteate at base; bracts caducous, ovate-lanceolate, 1–2.5 cm. Flowers yellow, small, 7–8 mm wide. Lateral sepals 2, broadly ovate, ca. 4 mm, 7-veined, base subequilateral, apex acuminate, abaxial midvein carinate. Lower sepals navicular, ca. 6 mm deep, narrowed into an incurved or involute spur ca. 1.5 cm, tip rounded, mucronulate. Upper petal orbicular, ca. 7 mm in diam., base retuse, apex rostellate, abaxial midvein shortly cornute; lateral united petals ± clawed, ca. 1.4 cm; basal lobes orbicular, small; distal lobes oblong or narrowly dolabriliform, ca. 2 × as long as basal lobes, apically 2-lobed, each lobe subacute at apex; auricle small. Filaments linear; anthers acute. Ovary erect, fusiform. Capsule erect, ca. 1.8 cm, slender. Seeds few, oblong, 3–5 mm, smooth, shiny. Fl. Aug.–Sep.

- Grasslands, along canals in valleys, moist places; 1300–1600 m. Chongqing (Chengkou), SW Hubei (Hefeng).


遂昌凤仙花  sui chang feng xian hua

Plants annual, (20–)25–40 cm tall, glabrous. Stem branched. Leaves alternate; petiole 2–4 cm; leaf blade ovate or oblong-ovate, 2.5–7.5 × 1.5–2.8 cm, membranous, with 1 pair of stipitate basal glands, lateral veins 4 or 5 pairs, base cuneate, margin crenate-serrate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, 2- or 3-flowered; peduncles erect, 1–2.5 cm. Pedicels 5–10 mm, slender, bracteate at base; bracts persistent, lanceolate, ca. 2.5 mm, membranous, apex acute. Flowers yellow, small, ca. 1.5 cm deep. Lateral sepals persistent, ovate, ca. 2.5 mm, apex acute. Lower sepals navicular, ca. 1.6 cm deep, gradually narrowed into an incurved spur ca. 1.1 cm; mouth vertical, ca. 5 mm wide, tip cuspidate. Upper petal broadly ovate, ca. 3.5 × 4 mm, apex rounded, mucronulate, abaxial midvein narrowly carinate; lateral united petals not clawed, 8–10 mm, 2-lobed; basal lobes ovate, small; distal lobes dolabriliform, apically retuse. Filaments linear, ca. 2 mm; anthers ovoid, apex obtuse. Ovary linear, ca. 2 mm. Capsule fusiform, 1.2–1.8 cm. Seeds brown, elliptic, 2–3 mm, tuberculate. Fl. and fr. Sep.–Oct.

- Forest understories; 1100–1600 m. Zhejiang (Suichang).

140. Impatiens amabilis J. D. Hooker, Hooker’s Icon. Pl. 30: t.
Plants annual, 60–80 cm tall, glabrous. Stem erect, robust, many branched from base. Leaves alternate; petiole 1–2 cm; leaf blade pale green abaxially, green adaxially, ovate or ovate-lanceolate, 4–8 × 1.5–3 cm, rigid, with 1 or 2 stipitate glands at basal margin, lateral veins 6–8 pairs, base rounded or cuneate, attenuate into petiole, margin crenate or crenate-serrate, apex acuminate. Inflorescences in upper leaf axils, 2- or 3-flowered; peduncles 2–3 cm. Pedicels 1–1.5 cm, bracteate at base (but appearing as if at middle); bracts ovate, apex acuminate. Flowers pink-purple, 3–5 cm. Lateral sepals 2, 6–7 mm, rigid, base cordate, apex acute. Lower sepal navicular, gradually narrowed into an incurved, 2-denticulate spur ca. as long as limb; mouth oblique, 1–1.2 cm, tip obtuse. Upper petal orbicular, ca. 1.4 cm in diam., base cordate, apex retuse, hooked, abaxial midvein rostellate or shortly carinate at middle; lateral united petals not clawed, ca. 2 cm, 2-lobed; basal lobes orbicular, ca. 5 mm in diam., leathery; distal lobes dolabriliform, larger, apically retuse; auricle inflexed, small. Filaments broadly linear, short; anthers ovoid, apex acute. Ovary erect, fusiform. Capsule not seen. Fl. and fr. unknown.

- NC Sichuan (Lixian).


Plants annual, 30–50 cm tall, glabrous. Stem erect or basally prostrate, many branched in upper part, lower nodes swollen. Leaves alternate; petiole 2–5 cm; leaf blade pale green abaxially, green adaxially, ovate, 10–14 × ca. 5 cm, membranous, glabrous, lateral veins 5–7 pairs, curved, base cuneate or narrowly so, margin serrate, teeth mucronulate, apex acuminate. Inflorescences axillary, 2- or 3-flowered; peduncles 2–5 cm. Pedicels 1–1.2 cm, slender, bracteate at base; bracts elliptic-ovate, 5–6 × 2–3 mm, 3-veined. Flowers purple, 1.2–1.4 cm wide. Lateral sepals 2, ovate, 6–8 mm, herbaceous, apex mucronulate. Lower sepal 1.4–1.5 cm deep, limb navicular, gradually narrowed into an involute, slender spur; mouth vertical, obtuse. Upper petal orbicular, ca. 6 mm, apex mucronulate, abaxial midvein erect, green, carinate, rostellate at middle; lateral united petals ca. 1.3 cm, 2-lobed; basal lobes white, small, obtuse-rounded; distal lobes purple, dolabriliform, larger, apically retuse; auricle inflexed, narrow. Filaments slender; anthers ovoid, apex acute. Ovary erect, fusiform. Capsule not seen. Fl. Sep.

- Forest margins along grasslands; 1800–1900 m. NC Sichuan (Dujiang Yan).


Plants annual, 20–40 cm tall, glabrous. Stem erect, robust, simple, naked basally, with many fibrous roots. Leaves alternate; petiole 2.5–3 cm; leaf blade pale green abaxially, dark green adaxially, ovate, obovate, elliptic, or obo-lanceolate, 5–10 × 2.5–3.5 cm, papery, abaxially glabrous, adaxially sparsely appressed strigose, rarely ciliate, lateral veins 6–8 pairs, base acuminate, margin crenate-serrate, teeth mucronulate, apex acuminate or shortly acute. Inflorescences in upper leaf axils, 1- or 2-flowered; peduncles longer or shorter than leaves, 3–5 cm. Pedicels 0.5–2.5 cm, bracteate at or near base; bracts caducous, narrowly lanceolate, 3–7 mm. Flowers yellow, large, 3–5 cm deep. Lateral sepals 2, ovate or ovate-lanceolate, 8–10 × 7–8 mm, membranous, 3–5-veined, apex acute, abaxial midvein fine, not thickened. Lower sepal red spotted, funnel-form or sub-saccate, limb ca. 1.4 cm deep, narrowed into an involute spur; spur longer than limb, ca. 2.5 cm; mouth vertical, 1.5–2.2 cm, tip acute or acuminate. Upper petal orbicular to broadly ovate, 1.5–1.8 × ca. 2 cm, abaxial midvein fine, with a crista 2–3 mm high at middle; lateral united petals ± clawed, 3–4 cm, 2-lobed; basal lobes orbicular to broadly triangular-ovobave, ca. 1.2 × 1.2 cm, large; distal lobes broadly dolabriliform to suborbicular, ca. 1.8 × 1.4 cm, longer, apically slightly retuse; auricle inflexed, reniform. Filaments linear, 6–7 mm; anthers ovoid, apex obtuse. Ovary curved, fusiform. Capsule oblong, 1.5–2.5 cm. Seeds many. Fl. Aug–Oct. 2n = 16*.

- Mixed forests, riversides, along canals in valleys, moist places; 600–2100 m. S Yunnan.


Plants annual, 30–60 cm tall. Stem robust, simple and long naked, or branched; branchlets succulent. Leaves alternate; petiole long, 3–4 cm; leaf blade pale green-gray abaxially, green adaxially, ovate-elliptic or obovate, 3–13 × 3–4.5 cm, membranous, abaxially glabrous, setose between teeth, adaxially striose, lateral veins 5–7 pairs, base cuneate, attenuate into petiole, margin crenate or crenate-serrate, apex acuminate. Inflorescences in upper leaf axils, 2- or 3-flowered; peduncles longer than petioles, 2–3–(–4) cm, elongate at fruiting. Pedicels 1–2 cm, bracteate at base (but appearing as if at middle in upper flowers); bracts persistent, green, lanceolate or ovate-lanceolate, 3–5 mm, herbaceous. Flowers yellowish, ca. 3.5 cm deep. Lateral sepals 2, green, ovate or orbicular, 6–10 × 6–8 mm, membranous, 3–5-veined. Lower sepal navicular, limb 1.5–1.8 cm deep, narrowed into an incurved spur; spur orange striate, ca. as long as or longer than limb, slender; mouth vertical, 1.5–2 cm, tip acuminate. Upper petal orbicular, 1.3–1.5 cm, apex cuspidate, abaxial midvein not thickened, narrowly carinate; lateral united petals not clawed, 2–2.5 cm, 2-lobed; basal lobes suborbicular, small; distal lobes dolabriliform, larger, apex obtuse-rounded; auricle inflexed, orbicular. Filaments fibrous, 5–6 mm; anthers ovoid, apex obtuse. Ovary linear. Capsule erect, narrowly fusiform, 2–2.5 cm. Seeds many, yellow-brown, oblong, 2–3 mm, smooth. Fl. Jul–Sep. 2n = 16*.

- Mixed forests, shaded moist places, roadsides; 900–1800 m. Chongqing, Sichuan (Ermei Shan, Hongya, Jinyuan Shan).


Plants annual, small, 15–25 cm tall. Stem erect or as-
1.2 × 1.2 cm, apex truncate; distal lobes suborbicular, ca. 1.5 cm, 2-lobed; basal lobes broadly triangular-obovate, ca. 1.5 cm, densely pubescent, bracteate at base (but appearing as though at middle); bracts linear, 4–6 mm, densely pubescent, persistent. Flower yellow with reddish spots, ca. 2 cm, ca. 3.5 cm deep. Lateral sepals 2, linear, ca. 1 cm, densely pubescent. Lower sepal navicular, limb ca. 1.2 cm deep, outside pubescent, narrowed into a spur ca. 2 cm. Upper petal orbicular, ca. 1.2 cm, ca. 1.4 cm wide, apex retuse, abaxial midvein conspicuously cristate, crista ca. 3 mm high; lateral united petals ca. 2.1 cm, 2-lobed; basal lobes broadly triangular-obovate, ca. 1.2 × 1 cm, apex truncate; distal lobes suborbicular, ca. 1.2 cm × 8 mm, apically slightly retuse; auricle inflexed, reniform. Filaments linear; anthers ovoid, apex obtuse. Capsule (immature) narrowly ovoid. Fl. Oct.

甘堤龙凤仙花 甘堤龙凤仙花


甘堤龙凤仙花 甘堤龙凤仙花

Plants annual, ca. 30 cm tall. Stem erect or ascending from base, succulent, with dense spreading hairs apically. Leaves alternate, petiolate or sessile in upper leaves; petiole 3–5 cm, with glands; leaf blade broadly elliptic to elliptic, 9–12 × 4.5–5.5 cm, both surfaces sparsely pubescent, base attenuate, margin crenate, apex acute. Inflorescences in upper leaf axils, 2- or 3-flowered; peduncles ca. 2 cm, densely pubescent. Pedicels ca. 1.5 cm, densely pubescent, bracteate at base (but appearing as though at middle); bracts persistent, linear, ca. 8 mm, pubescent. Flower yellow, with reddish spots, ca. 3 cm, ca. 4 cm deep. Lateral sepals 2, ovate, ca. 0.9 mm, apex acuminate, pubescent. Lower sepal navicular, limb ca. 1.2 cm deep, outside pubescent, narrowed into a spur ca. 2.4 cm. Upper petal nearly orbicular, ca. 1.4 × 1.8 cm, apex retuse, abaxial midvein conspicuously cristate, crista ca. 4 mm high; lateral united petals ca. 2.5 cm, 2-lobed; basal lobes broadly triangular-obovate, ca. 1.2 × 1.2 cm, apex truncate; distal lobes suborbicular, ca. 1.5 × 1.1 cm, apically obliquely retuse; auricle inflexed, reniform. Filaments linear; anthers ovoid, apex obtuse. Fl. Aug.

Forests; ca. 1100 m. Yunnan (Maguan) [Myanmar].


吴氏凤仙花 吴氏凤仙花

Plants annual, more than 30 cm tall. Stem erect or ascending from base, succulent. Leaves alternate, petiolate or nearly sessile in upper leaves; petiole 5–7 cm, pubescent, glandular; leaf blade broadly elliptic to elliptic, 9–15 × 4–7 cm, both surfaces sparsely pubescent, base attenuate, margin crenate, apex acute. Inflorescences in upper leaf axils, 2-flowered; peduncles 2–3.5 cm, densely pubescent. Pedicels 1–1.5 cm, densely pubescent, bracteate at base (but appearing as though at middle); bracts linear, 4–6 mm, densely pubescent, persistent. Flower yellow with reddish spots, ca. 2 cm, ca. 3.5 cm deep. Lateral sepals 2, linear, ca. 1 cm, densely pubescent. Lower sepal navicular, limb ca. 1.2 cm deep, outside pubescent, narrowed into a spur ca. 2 cm. Upper petal orbicular, ca. 1.2 cm, ca. 1.4 cm wide, apex retuse, abaxial midvein conspicuously cristate, crista ca. 3 mm high; lateral united petals ca. 2.1 cm, 2-lobed; basal lobes broadly triangular-obovate, ca. 1.2 × 1 cm, apex truncate; distal lobes suborbicular, ca. 1.2 cm × 8 mm, apically slightly retuse; auricle inflexed, reniform. Filaments linear; anthers ovoid, apex obtuse. Capsule (immature) narrowly ovoid. Fl. Oct.

秋海棠叶凤仙花 秋海棠叶凤仙花

Plants annual, 30–70 cm tall. Stem usually simple or slightly branched. Leaves alternate, lower ones caducous; leaf blade gray-green abaxially, dark green adaxially, elliptic or ovate-elliptic, 7–13 × 2.5–5 cm, with 1 or 2 pairs of stipitate glands at basal margin, abaxially laxly adpressed strigose, adaxially glabrous, lateral veins 6 or 7 pairs, base cuneate, narrowed into petiole 1.5–3 cm, margin shallowly crenate, teeth mucronulate, apex acute or acuminate. Inflorescences in upper leaf axils, usually 2-flowered; peduncles 1.5–2 cm, glabrous. Pedicels ca. 2 cm, bracteate at base; bracts persistent, ovate, 4–6 mm, apex acute. Flowers pink, ca. 3 cm deep. Lateral sepals 2, orbicular, ca. 8 mm, apex acute. Lower sepal pink and yellowish, limb navicular, ca. 1.4 cm, abruptly constricted into an involute spur ca. 2.4 cm; mouth vertical, ca. 1.8 cm wide, tip slightly obtuse. Upper petal pink, broadly ovate, ca. 2 × 2 cm, apex rounded, abaxial midvein cristate, crista ca. 3 mm high; lateral united petals clawed, ca. 3.8 cm, 2-lobed; basal lobes broadly oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent; leaf blade pale green abaxially, dark green adaxially, narrowly lanceolate or oblanceolate, 3.5–10 × 1–2 cm, with 2 or 3 pairs of setose glands at basal margin, abaxially yellow-brown pubescent.
ially glabrous, setose between teeth, adaxially white adpressed hairy, lateral veins 5 or 6 pairs, base narrowly cuneate or sub-rounded, margin shallowly crenate, apex acute. Inflorescences in upper leaf axils, 2-flowered; peduncles 1.5–2 cm, glabrous. Pedicels ca. 1 cm, slender, bracteate at base; bracts persistent, linear, ca. 2 mm. Flowers pink, ca. 3 cm deep. Lateral sepals 2, subulate-lanceolate, ca. 4 mm, apex shortly aristate. Lower sepal pink-white, navicular, base constricted into an erect spur ca. 1.5 cm. Upper petal pink, orbicular, ca. 1 cm in diam., apex emarginate, abaxial midvein thickened, narrowly crenate, crista ca. 1.5 mm high; lateral united petals pink, ca. 2.6 cm, 2-lobed; basal lobes broadly obovate, ca. 1 cm, apex rounded; distal lobes ovate-dolabriform, ca. 1.8 cm, apex rounded; auricle inflexed, reniform. Filaments linear; anthers ovoid, apex obtuse. Ovary fusiform, glabrous. Capsule clavate, apex rostellate. Fl. Oct, fr. Nov.

- Understories of evergreen forests, moist places; 1000–1400 m. Yunnan (Yingjiang).


绿萼凤仙花 lü e feng xian hua

Plants annual, 30–40 cm tall. Stem erect, succulent, simple or rarely branched, glabrous. Leaves often crowded in upper part of stem, alternate; petiole 1–3.5 cm; leaf blade pale green abaxially, dark green adaxially, oblong-ovate or lanceolate, 2–11 × 2.5–4.5 cm, membranous, with few glands near base, setose between teeth, abaxially glabrous, adaxially sparsely white adpressed hairy, lateral veins 5 or 6 pairs, curved, base cuneate, attenuate into petiole, margin crenate, apex acuminate. Inflorescences in upper leaf axils, 1- or 2-flowered; peduncles longer than petioles, 3.5–6 cm. Pedicel 1–1.5 cm, bracteate at base (but appearing as if at middle); bracts persistent, lanceolate or linear-lanceolate, 3–4 mm. Flowers reddish, large, 3.5–4 cm deep. Lateral sepals 2, green, obliquely ovate or suborbicular, 8–10 × 5–6 mm, abaxial midvein not thickened. Lower sepal funneliform, limb ca. 1.5 cm deep, abruptly narrowed into an involute or incurved spur; spur pink striate, 2–2.5 cm; mouth vertical, ca. 1.5 cm wide, tip mucronulate. Upper petal cuculate, orbicular, 0.7–1.2 cm, abaxial midvein thickened, narrowly carinate; lateral united petals shortly clawed, ca. 2.5 cm, 2-lobed; basal lobes suborbicular; distal lobes oblong, longer, apex obtuse; auricle conspicuous. Filaments linear, apex dilated; anthers ovoid, apex obtuse. Ovary erect, fusiform. Capsule lanceolate, 1.5–2 cm. Fl. Oct–Dec.

- Sparse forests in valleys, by water in shaded places; 300–1300 m. Guangdong, Guangxi, Guizhou, Hunan.


川滇凤仙花 chuān diān fèng xiān hua

Plants 40–60 cm tall, glabrous. Stem erect; branches stout. Leaves alternate, petiole; petiole (3–)5–6 cm; leaf blade oblong-lanceolate or linear-oblong, 10–20 × 3–4 cm, membranous, lateral veins (6 or 7 in lower leaves) 8–10 pairs, curved, base broadly cuneate to cuneate, attenuate into petiole, margin crenate-serrate or crenate-serrulate, teeth mucronulate, apex ciliate-acuminate. Inflorescences 1- or 2-flowered; peduncles ca. 15 cm, stout. Pedicels bracteate at base (but appearing as if at middle); bracts narrowly lanceolate, 3–5 mm, hyaline margin. Flowers orange-yellow, 3–4 cm deep. Lateral sepals 2, orbicular, 0.7–1 cm, membranous, 5-veined, apex cuspidate. Lower sepal navicular, limb ca. 1.5 cm deep, gradually narrowed into an incurved or involute spur ca. 2 cm; mouth vertical, tip acute. Upper petal broadly ovate-orniculate, ca. 1.2 cm wide, abaxial midvein fine, narrowly crenate at middle; lateral united petals broadly clawed, ca. 2.5 cm, 2-lobed; basal lobes orbicular; distal lobes broadly dolabriform, longer; auricle inflexed, reniform. Filaments slender; anthers obtuse. Ovary fusiform. Capsule not seen. Fl. Aug–Sep.

- Understories of evergreen forests, moist places; ca. 1000 m. Sichuan (Emei Shan), NE Yunnan.


短喙凤仙花 duǎn huì fèng xiān hua

Plants 40–60 cm tall, glabrous. Stem erect; branches stout; branchlets erect or spreading, slender, rigid. Leaves alternate; petiole; petiole 5–20 mm; leaf blade pale green abaxially, green adaxially, ovate or elliptic, 3–4 × 2–2.5 cm, rigid, sometimes with 2 basal glands, setose between teeth, lateral veins 4 or 5 pairs, base cuneate, attenuate into petiole, margin crenate-serrulate, apex acute or acuminate, rarely obtuse. Inflorescences many, in upper leaf axils, 2-flowered; peduncles shorter than leaves, 2–2.5 cm. Pedicels short, 0.8–1 cm, elongate at fruiting, bracteate at base; bracts persistent, ovate, very small, apex acuminate. Flowers white, pink, yellow, or blue. Lateral sepals 2, broadly ovate, 4–5 mm, 3–5-veined, base cordate, apex acute or acumi-
nate. Lower sepal broadly funnelform, navicular, limb to 9 mm deep, gradually narrowed into an involute spur longer than limb; mouth vertical. Upper petal orbicular or broadly ovate, 6–7 mm in diam., abaxial midvein thickened, with a small sac or triangular cristate; lateral united petals not clawed, 6–8 mm, 2-lobed; basal lobes broadly orbicular; distal lobes oblong or narrowly dolabrilform, longer, apically retuse; auricle narrowly inflexed. Filaments short, broad; anthers obtuse. Ovary fusiform. Capsule linear or narrowly clavate, 1.2–1.4 cm. Seeds few, brown, oblong or elliptic, smooth, shiny. Fl. Jul–Aug, fr. Sep.

- Forest margins, grasslands, shaded moist places at roadsides; 1600–2400 m. Sichuan.


**太子凤仙花 tai zi feng xian hua**

Plants annual, 20–30 cm tall, glabrous. Stem many branched. Leaves alternate; petiole to 2 cm; leaf blade ovate-elliptic, 2–4 × 1–2 cm, with stipitate basal glands, glabrous, lateral veins 5 pairs, base narrowly cuneate, margin coarsely serrate, teeth mucronulate, apex acute. Inflorescences many, (2 or)3- or 4-flowered; peduncles 1.5–2 cm. Pedicels ca. 1 cm, slender, bracteate at base; bracts subulate. Flowers yellow, ca. 1.8 × 1.5 cm. Lateral sepals 2, green, small, ca. 2.5 × 2 mm, base cuneate or slightly cordate. Lower sepal obliquely funnelform, ca. 1 cm deep, base gradually narrowed into a curved, slender spur; mouth vertical, 8–9 mm wide, tip slightly obtuse. Upper petal ovate-orbicular, small, ca. 5 × 4 mm, abaxial midvein green, cristate; lateral united petals not clawed, ca. 1.8 cm; basal lobes obliquely ovate, small, ca. 4 × 2–3 mm; distal lobes broadly dolabrilform, apically retuse; auricle absent or inconspicuous. Filaments long, flattened; anthers small, obtuse. Ovary erect, slender. Capsule fusiform. Seeds few, usually 4 or 5, black, narrowly ovoid, ca. 3 × 1.5 mm, tuberculate. Fl. Aug–Sep.

- Forest margins, shaded moist places; 2800–2900 m. Sichuan (Emei Shan).


**厚裂凤仙花 hou lie feng xian hua**

Plants annual, 30–80 cm tall. Stem erect, simple, rarely branched, spreading brown tomentose in upper part. Leaves alternate; petiole 1–2 cm, slender; leaf blade elliptic, narrowly elliptic, or lanceolate, 3–6 × 1.5–3.5 cm, sparsely pilose, lateral veins 4–6 pairs, base cuneate, margin coarsely serrate, teeth mucronulate, apex acuminate. Inflorescences 1- or 2-flowered; peduncles 2–2.5 cm. Pedicels ca. 1 cm, bracteate at base; bracts narrowly lanceolate, margin entire. Flowers yellow, small, ca. 2 cm deep. Lateral sepals 2, ovate, 3–4 mm, abaxial midvein narrowly carinate. Lower sepal funnelform, narrowed into an incurved spur 8–10 mm. Upper petal elliptic, abaxial midvein rostellate, carinate; lateral united petals 1.2–1.4 cm, 2-lobed; basal lobes ovate-ornicular; distal lobes narrowly dolabrilform, apex subacute; auricle distinct. Anthers obtuse. Capsule linear. Fl. Jul–Sep, fr. Aug–Oct.

- Shaded moist places; 700–2000 m. Guizhou.

156. Impatiens ganipliana J. D. Hooker, Hooker’s Icon. Pl. 29: t. 2873. 1908.

**平坝凤仙花 ping ba feng xian hua**

Plants annual, 30–60 cm tall. Stem erect, lower part prostrate, succulent, spreading brown tomentose in upper part. Leaves alternate; petiole 1–2 cm, slender; leaf blade elliptic, narrowly elliptic, or lanceolate, 3–6 × 1.5–3.5 cm, sparsely pilose, lateral veins 4–6 pairs, base cuneate, margin coarsely serrate, teeth mucronulate, apex acuminate. Inflorescences 1- or 2-flowered; peduncles 2–2.5 cm. Pedicels ca. 1 cm, bracteate at base; bracts narrowly lanceolate, margin entire. Flowers yellow, small, ca. 2 cm deep. Lateral sepals 2, ovate, 3–4 mm, abaxial midvein narrowly carinate. Lower sepal funnelform, narrowed into an incurved spur; spur ca. 1 cm, slender, apex 2-fid. Upper petal elliptic, abaxial midvein rostellate, carinate; lateral united petals 2-lobed; basal lobes broadly oval; distal lobes dolabrilform, apex 2-lobed; auricle inflexed. Anthers obtuse. Capsule narrowly fusiform. Seeds black, oblong, ca. 2 mm, smooth. Fl. Jul–Aug, fr. Sep–Oct.

- Forest understories, grasslands, shores of ponds, along canals, moist places; 1000–2000 m. Guizhou.


**具鳞凤仙花 ju lin feng xian hua**

Plants annual, 30–50 cm tall. Stem erect, simple, rarely branched. Leaves alternate; petiole ca. 2 cm, slender; leaf blade ovate-ornicular or ovate-lanceolate, 3–6 × 2–3 cm, lateral veins 4 or 5 pairs, base broadly cuneate, margin coarsely serrate, teeth mucronulate, apex acuminate. Inflorescences axillary, 1- or 2-flowered; peduncles 4–5 cm, slender. Pedicels bracteate at base; bracts lanceolate, small. Flowers yellow, medium-sized, 2–5 cm. Lateral sepals 2, ovate, apex mucronulate. Low-

- Forest understories, along canals, shaded moist places; ca. 1000 m. Guizhou, Yunnan (Wenshan).


包氏凤仙花 bao shi feng xian hua

Plants subglabrous, or ± hairy above. Stem erect; branches spreading, slender. Leaves often crowded at apices of stem and branches, alternate, lower leaves petiolate, upper leaves sessile; petiole 1.7–2 cm; leaf blade gray-green abaxially, dark green adaxially, ovate-oblong or ovate-broad, (5–)6–10 × 2–3 cm, membranous, lateral veins 6 or 7 pairs, curved, base acute or cuneate, attenuate into petiole, margin crenulate, teeth mucronulate, apex acuminate or acute. Inflorescences in upper leaf axils, racemose, (2 or) 4-flowered; peduncles erect, shorter than leaves, 2–5 cm. Pedicels erect, fibrous, ca. 1.5 cm, bracteate at base; bracts recurved, linear-lanceolate, very small, ca. 2 mm. Flowers yellow, Delphinium-shaped, to 3 cm deep, narrow. Lateral sepals 2, linear-oblong, 3–5 mm, 1-veined, apex acute or acuminate. Lower sepal cornate, ca. 2.5 cm deep, narrowed into a curved or incurved spur apically 2-lobed or with a groove; mouth oblique, small, tip acuminate. Upper petal cucullate, orbicular, ca. 7 mm in diam., apex obtuse, abaxial midvein fine; lateral united petals not clawed, short, ca. 1.2 cm, 2-lobed; basal lobes oblong; distal lobes dolabriform, longer, apex rounded; auricle inflexed, narrow. Filaments fibrous; anthers obtuse. Ovary fusiform. Capsule linear, 2–2.5 cm. Seeds few, brown, oblong, ca. 3 mm. Fl. Aug–Sep.

- Forest understories, grasslands, shaded moist places on slopes, moist places by streams; 1800–2500 m. NE Yunnan.


包氏凤仙花 bao shi feng xian hua

Plants annual, 20–30 cm tall, glabrous. Stem erect, slender, simple or branched basally, or long naked basally. Leaves alternate; petiole 2–3 cm; leaf blade gray-green abaxially, dark green adaxially, ovate or ovate-oblong, (5–)6–10 × 2–3 cm, membranous, lateral veins 6 or 7 pairs, curved, base acute or cuneate, attenuate into petiole, margin crenulate, teeth mucronulate, apex acuminate or acute. Inflorescences in upper leaf axils, racemose, (2 or) 4-flowered; peduncles erect, shorter than leaves, 2–5 cm. Pedicels erect, fibrous, ca. 1.5 cm, bracteate at base; bracts recurved, linear-lanceolate, very small, ca. 2 mm. Flowers yellow, Delphinium-shaped, to 3 cm deep, narrow. Lateral sepals 2, linear-oblong, 3–5 mm, 1-veined, apex acute or acuminate. Lower sepal cornate, ca. 2.5 cm deep, narrowed into a curved or incurved spur apically 2-lobed or with a groove; mouth oblique, small, tip acuminate. Upper petal cucullate, orbicular, ca. 7 mm in diam., apex obtuse, abaxial midvein fine; lateral united petals not clawed, short, ca. 1.2 cm, 2-lobed; basal lobes oblong; distal lobes dolabriform, longer, apex rounded; auricle inflexed, narrow. Filaments fibrous; anthers obtuse. Ovary fusiform. Capsule linear, 2–2.5 cm. Seeds few, brown, oblong, ca. 3 mm. Fl. Aug–Sep.

- Forest understories, along canals, shaded moist places; ca. 1000 m. Guizhou, Yunnan (Wenshan).


髯毛凤仙花 ran mao feng xian hua

Plants annual, 30–45 cm tall, ± pilose. Stem erect, simple or branched in upper part. Leaves alternate; petiole 5–5.5 cm, stout, sparsely hirsute; leaf blade pale green abaxially, dark green adaxially, elliptic or elliptic-ovate, 5–12 × 2.5–5 cm, membranous, abaxially sparsely pubescent, adaxially sparsely hirsute, lateral veins 4–6(–14) pairs, base cuneate, margin coarsely serrate, teeth mucronulate, apex acute or acuminate. Inflorescences in upper leaf axils, usually (1 or) 3-flowered; peduncles conspicuously shorter than leaves, 0.5–1.5 cm, slender. Pedicels 0.5–1 cm, bracteate at middle; bracts persistent, linear, 2–4 mm, hirsute. Flowers yellowish, ca. 4 cm deep. Lateral sepals 4; outer 2: obliquely ovate, 7–10 × ca. 4 mm, 3–5-veined, villous, apex mucronulate; inner 2: linear, ca. as long as outer ones. Lower sepals saccate, ca. 2 cm deep; mouth oblique, tip acuminate, narrowed into an incurved, 2-fid spur, barbate. Upper petal orbicular, ca. 2 cm in diam., abaxially pubescent; lateral united petals clawed, 2–2.5 cm, 2-lobed; basal lobes orbicular; distal lobes dolabriform, large, apex acute; auricle large. Filaments short, winged; anthers acute. Ovary fusiform. Capsule (immature) linear, ca. 1 cm, apex rostellate. Fl. Aug.

- Forest understories, open slopes, by streams, along canals; 2000–3000 m. SW Sichuan, NW Yunnan.


窄萼凤仙花 zhai e feng xian hua

Plants annual, 20–70 cm tall. Stem erect, and branches purple or red-brown spotted. Leaves often crowded at apex of stem, or remote, alternate; petiole 2.5–4.5 cm; leaf blade oblong or oblong-lanceolate, 6–15 × 2.5–5.5 cm, with few ciliate glands at basal margin, lateral veins 7–9 pairs, base cuneate, margin crenate, apex c audate-acuminate. Inflorescences axillary, 1–4-flowered. Pedicels slender, bracteate at base; bracts linear. Flowers purple-red, ca. 1.5 cm deep or larger. Lateral sepals 4; outer 2: linear-lanceolate; inner 2: linear. Lower sepal saccate, abruptly narrowed into an incurved short spur. Upper petal broadly reniform, apex emarginate, abaxial midvein carinate, crista above middle; lateral united petals not clawed, 2-lobed; basal lobes elliptic; distal lobes oblong-dolabriform; auricle suborbicular. Anthers obtuse. Capsule linear. Fl. Jul–Aug, fr. Sep–Oct.

- Forests on slopes, forest margins, grasslands, along water edges, shaded moist places; 800–1800 m. Chongqing, Gansu, Guizhou, Henan, Hubei, Hunan, Shaanxi, Shansi, Sichuan.

1a. Stem with leaves crowded at apex; inflorescences 1- or 2-flowered; flowers relatively large ........................................ 161a. var. stenosepala

1b. Stem with remote leaves; inflorescences
usually 3- or 4-flowered; flowers smaller (ca. 1.5 cm deep) ............................. 161b. var. parviflora

161a. Impatiens stenosepala var. stenosepala

窄萼凤仙花 (原变种) zhæi e feng xian hua (yuàn biàn zhòng)

Impatiens punctata Franchet ex J. D. Hooker (1908), not Wallich ex J. D. Hooker & Thomson (1860).

Stem with leaves crowded at apex. Inflorescences 1- or 2-flowered. Flowers relatively large.

- Forests on slopes, grasslands, along water edges; 800–1800 m. Gansu, Guizhou, Henan, Hubei, Hunan, Shaanxi, Shanxi, Sichuan.


小花窄萼凤仙花 xiǎo huā zhǎi è fèng xiān hua

Stem with remote leaves. Inflorescences short, usually 3- or 4-flowered. Flowers smaller (ca. 1.5 cm deep).

- Forest margins, shaded moist places; 1000–1100 m. Chongqing (Nanchuan).

162. Impatiens lushiensis Y. L. Chen, nom. nov.

卢氏凤仙花 lu shì fèng xiān huā


Plants annual, 40–100 cm tall. Stem erect, branched in upper part, glabrous or sparsely hairy. Leaves alternate, petiolate; leaf blade ovate or ovate-lanceolate, 7–13 × 2–5 cm, lateral veins glabrous or sparsely hairy, base rounded or cordate, margin sharply serrate, apex caudate-acuminate. Inflorescences in upper leaf axils, 2–4-flowered; peduncles 5–15 mm. Pedicel slender, bracteate at middle; bracts persistent, ovate. Flowers purplish, 2.5–3 cm deep. Lower sepals 4; outer 2: obliquely ovate, larger, ca. 8 × 4–5 mm, abaxial midvein carinate; inner 2: subulate, very small, 1–1.5 mm. Lower sepal inside of throat purplish spotted, saccate, abruptly narrowed into an incurved spur 0.8–1 cm. Upper petal reniform-orbicular, ca. 1.1 × 1 cm, apex retuse, cuspitate, abaxial midvein slightly thickened, inconspicuously carinate; lateral united petals ± clawed, 2.2–2.3 cm, 2-lobed; basal lobes suboblong; distal lobes dolabridiform, apex obtuse; auricle inflexed, suborbicular. Filaments linear, ca. 6 mm, apex dilated; anthers ovoid, apex acute. Ovary fusiform, 3–4 mm. Capsule linear-cylindric, 2.5–3 cm. Seeds many, brown, oblong-globose, ca. 4 mm, rugose, apex rostellate. Fl. Sep.

- Stony crevices in valleys; ca. 1200 m. Anhui (Yuexi).


黄麻叶凤仙花 huáng mā yè fèng xiān huā

Plants annual, 30–50 cm tall. Stem erect, branched or simple. Leaves alternate; petiole 3–10 mm; leaf blade ovate or ovate-lanceolate, 3–10 × 1.5–3.5 cm, with ciliate basal glands, lateral veines 6 or 7 pairs, base obtuse or slightly acute, margin serrate, apex caudate-acuminate. Inflorescences (1 or)2-flowered; peduncle shorter than leaves, slender. Pedicels short, bracteate below flowers; bracts persistent, ovate, or with 1 or 2 linear bracts at middle. Flowers yellow, sometimes purple spotted, large, 2.5–3 cm deep. Lower sepals 4; outer 2: oblong-oblong, apex acuminate; inner 2: oblong-lanceolate or linear, small. Lower sepal saccate, abruptly narrowed into an incurred spur; spur short, 2-fid. Upper petal orbicular, apex retuse, mucronulate, abaxial midvein cristate; lateral united petals ± clawed; basal lobes orbicular; distal lobes broadly dolabridiform, larger; auricle large. Anthers obtuse. Capsule linear. Fl. Sep.–Oct. 2n = 14*.

- Understories of mixed forests, forest margins, shaded moist places; 2100–3500 m. SW Sichuan, NW Yunnan.


异型叶凤仙花 yì xíng yè fèng xiān huā

Plants annual, slender, 20–30 cm tall, glabrous. Stem erect, green or purple-tinged, slender, simple or branched; branches spreading, short. Leaves alternate; leaf blade membranous. Lower leaves with petiole long, ca. 3 cm; leaf blade ovate or ovate-oblong, 5.7 × 2.5–3 cm, with stipitate glands at basal margin, lateral veins 4 or 5 pairs, base attenuate into petiole, margin crenate, teeth mucronulate, apex acute or acuminate. Upper leaves subsessile; leaf blade ovate-lanceolate, 4.7–2.5–3 cm, base cuneate or slightly cordate, apex acuminate. Inflorescences in upper leaf axils, usually 1(or 2)-flowered; peduncles shorter than petioles, 1–3 cm. Pedicels short, 5–10 mm, bracteate below flowers; bracts persistent, ovate, ca. 2 mm, with stipitate glands at basal margin, lateral veins 4 or 5 pairs. Flow-
ers orange, large, 2.5–3 cm deep. Lateral sepals 4; outer 2: ovate-oblong or orbicular, 4–7 mm, 1-veined, cuspidate; inner 2: same as outer ones in shape, but 1/2 as large, 1-veined. Lower sepal saccate, 1.5–2 cm deep, mouth oblique, ca. 1.5 cm wide, tip acute, abruptly narrowed into an incurved spur; spur short, ca. 5 mm, with a groove or 2-fid. Upper petal orbicular or obcordate, ca. 9 mm, abaxial midvein fine, carinate below apex; lateral united petals ± clawed, ca. 1.7 cm, 2-lobed; basal lobes oblong, small; distal lobes broadly dolabriform, apex rounded, apically retuse; auricle inflexed, narrowed. Filaments linear, short; anthers ovoid, apex obtuse. Ovary erect, ovoid-oralbicar. Capsule linear, 3–5 cm, apex rostellate. Fl. Sep–Oct.

- Understories of alpine Pinus or Tsuga forests; 2800–3400 m. SW Sichuan, Yunnan.


九龙凤仙花 jiu long feng xian hua

Plants annual, ca. 50 cm tall. Stem striate when dry, branched. Leaves alternate, petiolate; leaf blade narrowly oblong-lanceolate or lanceolate, 3–8 × (0.8–)1–2 cm, rigidly papery, with 2 pairs of ciliate stipitate basil glands, lateral veins 9–11 pairs, base rounded or subcordate; rarely broadly cuneate, margin densely sharply serrate, apex cuneate-acuminate. Inflorescences axillary, (1 or)2-flowered; peduncles shorter than leaves. Pedicels bracteate below flower; bracts persistent, lanceolate or linear-lanceolate, 4–6 mm, apex acuminate. Flowers yellow, large, to 3 cm deep, 1.8–2 cm wide. Lateral sepals 4, thinly membranous; outer 2: ovate or obliquely ovate, 8–9 mm, nearly inequilateral, 5–7-veined, base rounded, apex green and long cuspidate; inner 2: falcate-oblanceolate, very small, 6–7 mm, 1-veined, apex acuminate. Lower sepal slightly curved, saccate, ca. 2 cm deep, abruptly narrowed into a 2-fid, short spur 5–6 mm. Upper petal orbicular, 1.2–1.3 cm, apex emarginate, slightly curved rostellate, abaxial midvein carinate at middle; lateral united petals ± clawed, ca. 1.5 cm, 2-lobed; basal lobes orbicular; distal lobes broadly dolabriform, ca. 3 × as long as basal lobes; auricle absent. Filaments linear, anthers obtuse. Ovary fusiform. Capsule linear, 3–3.2 cm. Seeds 7, brown, oblong, ca. 3 mm, rugose. Fl. Sep–Oct.

- Dense forests; ca. 2700 m. SW Sichuan (Jiulong).


腹唇凤仙花 fu chun feng xian hua

Plants annual, 30–40 cm tall, slender, glabrous. Stem erect, long naked basally, ± branched. Leaves alternate; petiole long, 2–3 cm, slender, without glands; leaf blade ovate, 3–4 × 2–2.5 cm, membranous, lateral veins 6 or 7 pairs, fine, base cuneate, attenuate into petiole, margin serrulate, apex acuminate. Inflorescences 1-flowered; peduncles slender. Pedicels 1–1.5 cm, elongate at fruiting; bracts few, fibrous, 1–3 mm. Flowers pink-purple, large, ca. 2 cm deep. Lateral sepals 4, outer 2: linear-lanceolate, ca. 7 × 2–3 mm, apex long acuminate; inner 2: linear, ca. 4 mm, apex acute. Lower sepal incurved, turgid; mouth horizontal, navicular, abruptly narrowed into an erect, short spur. Upper petal orbicular, ca. 1.2 cm in diam., apex rostellate, abaxial midvein thickened, carinate; lateral united petals broadly clawed, 1.8–2 cm, 2-lobed; basal lobes oblong, apex subacute; distal lobes obovate-oblong, ca. 1.5 × as long as basal lobes; auricle inflexed. Filaments linear, short; anthers obtuse. Ovary striate, fusiform. Capsule erect, linear, ca. 2 cm. Seeds few, brown, broadly ovoid or globose, flattened, ca. 2.5 mm, smooth. Fl. Aug–Sep.

- Shaded moist places on slopes, stream sides, roadsides; ca. 900 m. Sichuan (Ebian).


叶底花凤仙花 ye di hua feng xian hua

Plants annual, 40–50 cm tall, with few supporting roots; glabrous or sparsely glandular hairy or arachnoid-hairy. Stem erect, simple or virgate-branched from base. Leaves alternate; petiole 1.5–3 cm, with few stipitate glandular hairs at base; leaf blade pale green abaxially, green adaxially, ovate or ovate-lanceolate, 5–8.5 × 2.5–3.5 cm, membranous, abaxially glabrous, adaxially adpressed pilose, lateral veins 6–8 pairs, base cuneate or subrounded, margin crenate, teeth mucromulate, apex acuminate. Inflorescences in upper leaf axils, racemose, laxly 4-6-flowered; peduncles shorter or longer than petioles, 4–6 cm. Pedicels 1–2 cm, slender, bracteate at base; bracts caducous, green or pink-purple, broadly ovate, 4–6 × 2–3 mm, membranous, apex acute. Flowers yellow, purple-tinged, 1.5–2 cm deep. Lateral sepals 4, membranous; outer 2: oblong or ovate-oblong, ca. 5 mm, inequilateral, apex cuspidate; inner 2: lanceolate, shorter than outer ones, 1-veined, apex acuminate. Lower sepal navicular, ca. 1.5 cm deep, gradually narrowed into an incurved spur; spur 4–5 mm, slender, cornute. Upper petal orbicular, 0.8–1 cm wide, apex retuse, abaxial midvein not thickened; lateral united petals not clawed, ca. 1.5 cm, 2-lobed; basal lobes oblong; distal lobes longer, narrow, apex rounded; auricle inflexed. Filaments linear; anthers obtuse. Ovary erect, fusiform. Capsule (immature) linear. Fl. Aug.

- Broad-leaved forests, forest margins by streams; 1900–2600 m. SW Sichuan, NW Yunnan.


黄头凤仙花 huang tou feng xian hua

Plants annual, 10–16 cm tall, slender, glabrous, with few supporting roots and fibrous roots. Stem erect, often with opposite branches basally, rarely simple, naked at base. Leaves alternate, petiolate or upper leaves subsessile; petiole 0.5–1(–2) cm; leaf blade green on both sides, ovate or ovate-oblong, 1–2 × 0.8–1 cm, membranous, lateral veins 2 or 3 (or 4) pairs, inconspicuous, base broadly cuneate or rounded, margin remotely crenate or shallowly undulate, teeth mucromulate, apex obtuse. Inflorescences in upper leaf axils, 1- or 2-flowered; peduncles often ca. 1/2 as long as leaves. Pedicels 5–10 mm, slender, bracteate above middle; bracts persistent, lanceolate, ca. 2 mm. Flowers golden-yellow, large, ca. 3.5 cm deep. Lateral sepals 4, outer 2: orbicular, 2–3 mm, submembranous, midvein fine, apex mucromulate; inner 2: ovate, very small, membranous, midvein inconspicuous, apex obtuse. Lower sepal purple spotted, funnelform, 2–2.5 cm deep, gradually narrowed into an incurved,
slender spur 1.5–2 cm; mouth vertical, ca. 8 mm wide, tip acute. Upper petal suborbicular, 5–6 mm, apex emarginate, abaxial midvein thickened, carinate at middle; lateral united petals not clawed, 2.3–2.9 cm, 2-lobed; basal lobes orbicular, very small, 2–3 mm in diam.; distal lobes broadly dolabridiform, 5–7 mm, apex rounded; auricle inflexed, very small. Filaments linear, 4–5 mm; anthers obtuse. Ovary erect, fusiform, ca. 5 mm. Capsule not seen. Fl. Aug.

Forest margins, grasslands, limestone areas; ca. 3100 m. SW Sichuan, NW Yunnan.


横断山凤仙花 heng duan shan feng xia hua

Plants annual, 10–15 cm tall. Stem erect, slender, simple or rarely branched in upper part, yellow-brown pilose. Leaves alternate; petiole 0.5–1 cm, slender, yellow-brown pilose; leaf blade pale green abaxially, dark green adaxially, ovate or oblong-ovate, 2–3 × 1–1.5 cm, membranous, with 1 or 2 pairs of basal glands, abaxially yellow-brownish pilose on veins, adaxially sparsely stigrose, lateral veins 3–5 (or 6) pairs, curved, base cuneate, margin crenate-serrate, apex acute. Inflorescences in upper leaf axils, 1-flowered; peduncles ca. as long as leaves or slightly longer, slender, 0.6–1 cm, sparsely yellow-brown puberulent. Pedicels bracteate at base; bracts persistent, ovate-lanceolate, 1–2 cm. Flowers golden-yellow, small, ca. 1 cm deep. Lateral sepals 4, outer 2: ovate-lanceolate, ca. 3 × 1 mm, 3-veined, apex mucronulate; inner 2: linear-lanceolate, hyaline margined, minute, ca. 1.5 × 0.5 mm. Lower sepals narrowly funnelform, 1–1.5 cm deep, gradually narrowed into a recurved or incurred spur; mouth oblique, ca. 7 mm wide, tip acute. Upper petal cucullate, elliptic, ca. 5 × 4–5 mm, apex rounded, abaxial midvein not thickened, puberulent; lateral united petals clawed, ca. 1.2 cm, 2-lobed; basal lobes oblong-oblong, apex acuminate; distal lobes dolabriform, apex obtuse; auricle inflexed, narrow. Filaments linear, ca. 3 mm; anthers ovoid, apex obtuse. Ovary erect, fusiform, ca. 2.2 mm. Capsule (immature) fusiform, 4–5 mm. Fl. Aug.–Sep.

Margins of evergreen forests; 1400–1500 m. NW Yunnan (Gongshan).


水金凤 shui jin feng

Plants annual, 40–70 cm tall. Stem succulent, robust, many branched in upper part, glabrous. Leaves alternate, upper leaves shortly petiolate or subsessile; petiole 2–5 cm, slender; leaf blade green abaxially, dark green adaxially, ovate or ovate-elliptic, 3–8 × 1.5–4 cm, both surfaces glabrous, base cuneate or rounded, margin crenate, teeth mucronulate, apex obtuse, rare acute. Inflorescences 2–4-flowered; peduncles 1–1.5 cm. Pedicels 1.5–2 mm, bracteate above middle; bracts persistent, lanceolate, 3–5 mm, herbaceous. Flowers yellow. Lower lateral sepals 2, ovate or broadly ovate, 5–6 mm, apex acute. Lower sepal sparsely orange spotted, broadly funnelform, gradually narrowed into an incurved spur 1–1.5 cm. Upper petal orbicular or suborbicular, ca. 1 cm in diam., apex emarginate, rostellate, abaxial midvein green cristate; lateral united petals not clawed, 2–2.5 cm, 2-lobed; basal lobes oblong, small; distal lobes orange spotted at base, broadly dolabridiform; auricle narrow. Filaments linear, slightly swollen above; anthers ovoid, apex acute. Ovary erect, fusiform. Capsule linear-cylindric, 1.5–2.5 cm. Seeds many, brown, oblong-globose, 3–4 mm, smooth. Fl. Jul.–Sep. 2n = 20.

Forest understories, forest margins, grasslands, along canals; 900–2400 m. Anhui, Gansu, Guangdong, Hebei, Heilongjiang, Henan, Hubei, Hunan, Jilin, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Shandong, Shanxi, Zhejiang [Japan, Korea, Mongolia, Russia (Far East, Siberia); C and SW Asia, Europe, NW North America].


长翼凤仙花 chang yi feng xian hua

Plants annual, 30–70 cm tall, glabrous. Stem erect, branched. Leaves alternate, shortly petiolate; leaf blade gray-green abaxially, green adaxially, elliptic or ovate-oblong, 5.5–10 × 3.5–5 cm, membranous, lateral veins 6 or 7 pairs, base rounded or cordate, margin coarsely crenate, teeth retuse and glandular-mucronulate, apex obtuse or slightly acute. Inflorescences in upper leaf axils, 2– or 3(or 4)-flowered; peduncles longer than petioles or 2.5–3 cm. Pedicels 1–1.5 cm, slender, elongate at fruiting, bracteate above middle; bracts persistent, ovate, 2–3 mm, apex acuminate. Flowers yellowish, large, 1.5–2 cm deep. Lateral sepals 2, broadly ovate or subcordate, 5–6 × 4–5 mm, hyaline margined, green veined, mucronulate. Lower sepals purple spotted, funnelform, 1.5–2 cm deep, gradually narrowed into an incurved spur; spur 1–1.5 cm, slender; mouth vertical, 6–7 mm wide, tip mucronulate. Upper petal subreniform, 0.8–1 cm, apex shortly rostellate, abaxial midvein slightly thickened, narrowly carinate; lateral united petals long clawed, ca. 2 cm, 2-lobed; basal lobes orbicular, apex obtuse or retuse; distal lobes narrowly elliptic, large, margin undulate, apex obtuse. Filaments linear; anthers ovoid, apex acute. Ovary fusiform. Capsule linear, 2–2.5 cm. Seeds few, brown, oblong, 3–4 mm, smooth. Fl. Jul.–Aug. fr. Sep.–Oct.

Moist grasslands in valleys, along canals, roadsides; 500–2000 m. W Hubei, E Sichuan.


四川凤仙花 si chuan feng xian hua

Plants annual, 30–50 cm tall, glabrous. Stem erect, robust; branches and branchlets elongate, slender. Leaves alternate. Lower and middle leaves long petiolate; petiole 3–5 cm; leaf blade ovate or oblong, 4–5 cm, membranous, base obtuse or rounded, apex obtuse. Upper leaves sessile or shortly petiolate; leaf blade green abaxially, green adaxially, oblong, glabrous, lateral veins 6–8 pairs, base cordate, margin coarsely crenate or crenate, teeth mucronulate. Inflorescences in upper leaf axils, 2– or 3-flowered; pedicels erect, ca. 1/2 as long as leaves, 2–2.5 cm, slender. Pedicels ca. 1 cm, slender, bracteate at middle; lowest pedicels without bracts. Flowers yellow-white, 1.5–2 cm deep. Lower sepals 2, orbicular or broadly ovate, 6–8 mm, membranous, reticulate veined, apex mucronulate. Lower sepals funneliform, ca. 3 cm deep, gradually narrowed into an
incurred long spur; mouth slightly oblique, ca. 1.5 cm, tip acute. Upper petal orbicular or obovate, 1–1.2 cm wide, apex cuspidate, abaxial midvein slightly thickened; lateral united petals not clawed, 2–3 cm, 2-lobed; basal lobes oblong or orbicular, apex retuse; distal lobes broadly or narrowly dolabroform, slightly curved, ca. 2 × as long as basal lobes, sometimes setose apically; auricle narrow. Filaments short, broad; anthers acute. Ovary erect, fusiform. Capsule linear. Fl. Aug.–Sep.

- Forest margins, slopes, shaded moist places; ca. 1900 m. Shanxi (Huxian), Sichuan (Emei Shan, Hongya).

176. Impatiens oligoneura J. D. Hooker, Hooker's Icon. Pl. 30: t. 2966. 1911.

少脉凤仙花 shao mai feng xian hua

Plants annual, 50–60 cm tall, glabrous. Stem erect, robust; branches and branchlets slender. Leaves alternate; petiole 1–4 cm; leaf blade pale green abaxially, green adaxially, oblong or ovate-oblong, 4–6 × 2–3 cm, membranous, without or with few basal glands, glabrous, shiny, lateral veins 3–5 pairs, base cuneate, margin coarsely crenate serrate, teeth mucronulate, apex acuminulate. Inflorescences in upper leaf axils, 1-flowered; peduncles longer than petioles, 3–4 cm. Pedicels bracteate above middle; bracts caducous, broadly ovate or orbicular, 4–5 mm, apex cuspidate, denticulate. Flowers yellow, red spotted, 3–3.5 cm deep. Lower sepals 2, obliquely ovate or ovate-oblong, margin denticulate, or entire, apex acuminulate, abaxial midvein thickened, winged. Lower sepal funnelform, ca. 2 cm deep, narrowed into a slender spur shorter than limb; mouth oblique, ca. 1.2 cm wide, tip acute. Upper petal suboblate, ca. 1.7 cm, apex obtuse, rostellate, abaxial midvein thickened, carinate; lateral united petals broadly clawed, ca. 2.2 cm, 2-lobed; basal lobes orbicular; distal lobes reflexed, orbicular or broadly dolabroform, large, apex rounded; auricle inflexed, elongate. Filaments short, broad; anthers ovoid, apex acute. Ovary erect, fusiform. Capsule (immature) linear. Fl. Jul.–Sep.

- Forest understoreys; ca. 2900 m. W Sichuan.


大鼻凤仙花 da bi feng xian hua

Plants annual, 60–100 cm tall, glabrous. Stem erect; branchlets elongate, slender, remotely leafy. Leaves alternate; lower and middle leaves long petiolate; upper leaves shortly petiolate or sessile; petiole 3–6 cm, slender; leaf blade 4–7 × 2.5–3.5 cm, membranous, in middle leaves ovate or ovate-oblong, lateral veins 7–11 pairs, apex subrounded; in upper leaves oblong, base cordate, margin coarsely crenate, teeth retuse, apex obtuse. Inflorescences in upper leaf axils, 1- or 2(or 3)-flowered; peduncles shorter than leaves, 2–3 cm. Pedicels 1–1.5 cm, bracteate at middle; bracts persistent, linear-subulate, ca. 2 mm. Flowers deep purple-red, large, 3–3.5 cm deep. Lower sepals 2, obliquely ovate or suborbicular, 6–7 mm, membranous, inequilateral, apex cuspidate, reticulate. Lower sepal purple spotted, broadly funnelform, 1.5–2 cm deep, gradually narrowed into an incurved spur 1–1.5 cm, with a groove; mouth vertical, 1–1.1 cm wide, tip acute. Upper petal cucullate, orbicular, 1–1.2 cm wide, apex slightly emarginate, abaxial midvein thickened, cristate above middle, crista long, elephant-trunk-shaped; lateral united petals not clawed, 2.5–3 cm, 2-lobed; basal lobes broadly oblong, ca. 1.2 cm wide; distal lobes broader, gradually narrowed; auricle inflexed, purple spotted, long. Filaments linear, very short; anthers acute. Ovary erect, fusiform. Capsule...
 Plants to 90 cm tall, glabrous. Stem erect, robust, 1–1.5 cm in diam. at base, nodes swollen, with few supporting roots, long naked in lower part, branched in upper part; branches spreading, slender. Leaves alternate, shortly petiolate. Lower leaves with petiole stout, 0.5–1.5(–3.5) cm; leaf blade ovate or obovate-oblong, 8–12(–15) × 3–5 cm, thinly membranous, lateral veins 6 or 7 pairs, midvein and lateral veins abaxially conspicuous, base cordate or rounded, margin coarsely crenate, teeth emarginate or rounded, apex obtuse. Upper leaves subsessile or very shortly petiolate; leaf blade yellow-green abaxially, dark green adaxially, ovate-oblong, ca. 5 × 2.5 cm. Inflorescences in upper leaf axils, 3– or 4-flowered; peduncles shorter than leaves, 1.5–3 cm, slender. Pedicels 1–2 cm, bracteate below flower; bracts persistent, lanceolate, 3–4 mm. Flowers yellow or pink-white, ca. 2.5 cm deep. Lower sepals 2, broadly ovate, 1–1.2 cm, membranous, 8- or 9-veined, midvein fine, apex acuminate, cuspitate. Lower sepals subglobose or cup-shaped, large, abruptly narrowed into an incurved spur; mouth vertical, ca. 2.5 cm wide, tip acuminate. Upper petal orbicular, ca. 1.3 cm in diam., abaxial midvein broadly crenate; lateral united petals not clawed, short, ca. 2.5 cm, 2-lobed; basal lobes orbicular; distal lobes dolabridiform, longer, apex long narrowed; auricle rounded. Filaments linear; anthers obtuse. Ovary fusiform. Capsule linear, 3.5–5 cm. Seeds many, obvoid or oblong, ca. 2.5 mm, tuberculate. Fl. Aug.–Sep.

- Mixed forests, grassy slopes; 3000–3600 m. NW Yunnan.


叶耳凤仙花

Plants annual, 30–40 cm tall. Stem erect, slender, branched or simple, glabrous. Leaves alternate. Lower and middle leaves petiolate; petiole 2–3 cm, slender; leaf blade broadly ovate or ovate-ombilicate, 3–5 × 1–2 cm, thinly membranous, base abruptly attenuate into petiole, apex obtuse. Upper leaves sessile or subsessile, oblong, glabrous, setose between teeth, lateral veins 4–6 pairs, glabrous, base cordate, slightly amplexicaul, margin coarsely crenate. Inflorescences in upper leaf axils 1–5-flowered; peduncles 2–3 cm, slender. Pedicels slender, bracteate below flowers; bracts persistent, ovate. Flowers purplish or dirty yellow, large, 2–3 cm deep. Lateral sepals 2, obliquely ovate or ovate-ombilicate, inequilateral, apex acute. Lower sepal saccate, abruptly narrowed into an incurved spur; spur short, shallowly 2-fid. Upper petal ciliate, orbicular, abaxial midvein thickened, slightly ciliate middle; lateral united petals 2-lobed; basal lobes subtrigonal, small; distal lobes dolabridiform, large, apex acute; auricle large. Anthers obtuse. Capsule linear, 3–4 cm. Seeds brown, elliptic-ombilicate, tuberculate. Fl. Jul.–Sep.

- Abies or Quercus forests, by streams, along canals; 3400–4200 m. SW Sichuan, SE Xizang, Yunnan.


近无距凤仙花

Plants annual, 30–60 cm tall. Stem erect, branched in upper part; branchlets ascending, slender. Leaves subopposite with petiole 2.5–4.5 cm in lower part of stem, alternate and shortly petiolate or subsessile in upper part of stem; leaf blade pale green abaxially, green adaxially, ovate or ovate-oblong, 2.5–9 × 1.5–3 cm, membranous, sparsely puberulent or subglabrous, lateral veins 4–6 pairs, inconspicuous, base broadly cuneate or cordate in lower leaves, but cordate-amplexicaul in upper leaves, margin coarsely retuse, sometimes undulate, rarely nearly entire, apex obtuse or rounded. Inflorescences in upper leaf axils, 1- or 2-flowered; peduncles shorter than leaves, 3–4 cm. Pedicels 1.3–1.5 cm, bracteate above middle; bracts persistent, ovate-lanceolate, ca. 3 mm, leathery. Flowers purple-red, 2.5–3 cm deep. Lower sepals 2, obliquely ovate, 10–12 × 8–9 mm, abaxial midvein not thickened, 5-veined. Lower sepals saccate, 2–2.5 cm deep, abruptly narrowed into a very short, erect or curved spur ca. 2 mm, or almost without spur; mouth

183. Impatiens undulata


185. Impatiens apsotis J. D. Hooker, Hooker’s Icon. Pl. 30: t. 2972. 1911.

186. Impatiens xi gu feng xian hua
Plants annual, 30–60 cm tall. Stem erect, slender, simple or branched, nodes and upper part brown pubescent. Leaves alternate; leaf blade ovate or ovate-lanceolate, 5–10 × 2–3 cm, with few basal glands, base narrowly cuneate, margin serrulate, apex acute or acuminate. Inflorescences 1- or 2-flowered; peduncles slender. Pedicels short, bracteate above middle; bracts lanceolate. Flowers purple-red. Lower sepal 2, subovate, long cuspitate, inequilateral, hyaline margin, denticulate on one side. Lower sepal navicular, narrowed into an incurved, long spur. Upper petal orbicular, apex rostellate, abaxial midvein carinate; lateral united petals not clawed, 2-lobed; basal lobes orbicular, small; distal lobes obovate-oblong; auricle obtuse. Anthers obtuse. Capsule linear. Fl. May–Aug, fr. Sep–Oct.

- Forest understories, grasslands on slopes, along canals, shaded moist places; 1200–2000 m. Guizhou, Henan, W Hubei, Hunan, Sichuan, Yunnan.

188. Impatiens leptocaulon J. D. Hooker, Hooker’s Icon. Pl. 29: t. 2872. 1908.

叶柄凤仙花  xie bing feng xian hua

Plants annual, 30–50 cm tall. Stem erect, slender, simple or branched from base. Leaves alternate, often crowded in upper part of stem; leaf blade oblong or oblong-lanceolate, 7–12 × 3–4 cm, with 2 globose basal glands, lateral veins 7–9 pairs, base cuneate, margin crenate, teeth mucronulate, apex acuminate or ciliate-acuminate. Inflorescences axillary, 1- or 2-flowered. Pedicels bracteate at middle; bract 1, caducous, linear, 3–4 mm. Flowers purple. Lower sepal 2, ovate, 3–4 mm wide, margin ciliate, sometimes remotely denticulate, carinate, apex cuspidate. Lower sepal broadly funnel-form, not saccate, to 3.5 cm deep, gradually narrowed into an incurved slender spur. Upper petal subreniform, abaxial midvein narrowly thickened; lateral united petals not clawed, 2-lobed; basal lobes oblong; distal lobes suborbicular, large. Anthers broadly ovoid, apically acute. Capsule linear. Fl. and fr. May–Nov.

- Forest margins, shaded moist places on slopes, along watercourses or canals; 500–1600 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Zhejiang.

Two of us (Ohba and Akiyama) prefer to treat Impatiens silvestrii as a distinct species.


大旗瓣凤仙花  da qi bai feng xian hua

Plants annual, 20–30 cm tall, glabrous, with few supporting roots. Stem erect, succulent, simple or branched at middle part, long naked basally, nodes swollen, sometimes with adventitious roots. Leaves alternate; petiole 1–2.5 cm; leaf blade pale green abaxially, dark green adaxially, oblong or oblong-lan-
ceolate, 5–9(-12) × 2.5–4 cm, thinly membranous, lateral veins 9–12 pairs, often with 2 globose basal glands, base cuneate, attenuate into petiole, margin crenate, emarginate, teeth mucronulate, apex acuminata. Inflorescences in upper leaf axils, (1 or)2-flowered; peduncles 4–7 cm. Pedicels 1.5–3 cm, slender, bracteate above middle; bracts persistent, lanceolate, 5–7 mm, apex acuminata. Flowers purple, 3.5–4 cm deep. Lateral sepals 2, green, broadly ovate, 5–6 × 3–4 mm, margin dentilicate, apex long cuspidate. Lower sepal narrowly funnelform, 4–4.5 cm, gradually narrowed into an incurved spur; spur 2–2.5 cm, slender; mouth oblique, ca. 1.5 cm, tip rostellata. Upper petal oblate or reniform, large, ca. 1.6 × 3.5 cm, apex retuse, mucronulate, abaxial midvein narrowly carinate; lateral united petals not clawed, ca. 2.6 cm, 2-lobed; basal lobes oblong, apex rounded; distal lobes dolabrilform, 2-lobed apicifi; auricle inconspicuous. Filaments linear, ca. 5 mm; anthers obtuse. Ovary erect, fusiform, 5–6 mm. Capsule oblong, 1.8–2 cm. Seeds many, brown, globose, ca. 3 mm, smooth. Fl. Sep–Oct.

- Forests, grasslands at roadsides, shaded moist places; 1000–1600 m. Guangxi.

**Impatiens macrovexilla** var. *yaoshanensis* S. X. Yu et al. (Acta Phytotax. Sin. 45: 710. 2007), also from Guangxi, was published as this volume was going to press and therefore could not be treated here.


**念珠凤仙花** nian zhu feng xian hua

Plants annual, 20–60 cm tall, subglabrous, with few supporting roots. Stem erect or laxly branched, soft, slender or stout basally; branches slightly curved. Leaves alternate, petiolate, subsessile in upper ones; petiole 1–4 cm, slender; leaf blade ovate, oblong, or subelliptic, or upper ones ovate-lanceolate or oblong, 4–8.5 cm, thinly membranous, lateral veins 4–6 pairs, fine, base broadly cuneate or subrounded, upper ones rounded or cordate, margin coarsely crenate, teeth mucronulate, apex obtusely caudate. Inflorescences in leaf axils, 1–3-flowered; peduncles fibrous, 1–3 cm, sparsely puberulent or glabrous. Pedicels 1–1.5 cm, elongate at fruiting, bracteate at middle; bracts persistent, linear-setose, ca. 2 mm. Flowers pink, small, ca. 1.5 cm deep. Lateral sepals 2, ovate, 3–4 mm, abaxial midvein obtusely cristata, base cordate, margin entire or dentilicate on one side, apex acute or acuminate. Lower sepal navicular, vertical, with a curved spur; spur subequal to limb, 5–6 mm, apex with a groove or 2-fid. Upper petal orbicular, 6–8 mm in diam., cucullate, abaxial midvein narrowly cristate at middle; lateral united petals not clawed, 1.2–1.4 cm, 2-lobed; basal lobes small, sometimes rudimentary; distal lobes reflexed, clawed, lunar, abruptly narrowed basally, apex obtuse; auricle conspicuous, dentate or rounded. Filaments slender; anthers small, obtuse. Ovary erect, fusiform. Capsule linear, 2.5–3.5 cm, torulose. Seeds many, brown, elliptic, 3.5–4 mm, shiny. Fl. Aug.

- Forest understories; ca. 3200 m. W Sichuan.


**微萼凤仙花** wei e feng xian hua

Plants annual, 20–40 cm tall, glabrous. Stem erect, slender, simple, long naked basally, internodes 3–7 cm. Leaves alternate; petiole 0.3–1 cm; leaf blade gray-green abaxially, dark green adaxially, ovate-lanceolate, 3–5 × 2–2.5 cm, with 1(or 2) pair(s) of basal glands, lateral veins 4 or 5 pairs, curved, midvein and lateral veins conspicuous abaxially, base acute, attenuate into petiole, margin serrulate, teeth mucronulate, apex acuminata. Inflorescences in upper leaf axils, 2-flowered; peduncles erect, 1–1.5 cm, fibrous. Pedicels ca. 1 cm, elongate at fruiting, bracteate at middle; bracts persistent, very small. Flowers yellow, very small, ca. 1 cm deep. Lateral sepals 2, ovate, minute, shorter than 1 mm, thick, abaxial midvein thickly cristata, margin sparsely denticulate on one side, apex cuspidata. Lower sepal funnelform or cup-shaped, to 1 cm, gradually narrowed into an incurved spur ca. 2.5 cm; mouth vertical, ca. 5 mm wide, tip obtuse. Upper petal oblate, ca. 1 cm wide, abaxial midvein cristata; lateral united petals not clawed, short, 1.3–1.5 cm, 2-lobed; basal lobes orbicular, small; distal lobes reflexed, obovate-orbicular or lunar; auricle indented. Filaments very short; anthers obtuse. Ovary fusiform. Capsule not seen. Fl. Oct.

- By streams on slopes, shaded moist places; ca. 1900 m. Yunnan (Yanjin).


**斯格玛凤仙花** si ge ma feng xian hua

Plants annual, 50–60 cm tall, glabrous. Stem erect, long naked basally, branched. Leaves alternate; petiole 5–10 mm; leaf blade ovate or ovate-lanceolate, 3–6 × 2–3 cm, base without bristles or 2-setose, attenuate into petiole, midvein abaxially prominent, lateral veins 6 or 7 pairs, margin serrulate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, over subtending leaves, 2-flowered. Pedicels 1–2 cm, bracteate above middle; bracts persistent, ovate-lanceolate, 8–10 mm, apex acuminate. Flowers white or white-green, 1–1.5 cm wide. Lateral sepals 2, ovate, 6–7 mm, S-curved, quite inequilateral, margin entire or inconspicuously denticulate on one side, apex acuminate. Lower sepal funnelform, abruptly narrowed into an incurved spur 2–2.8 cm; mouth vertical, ca. 1 cm, tip cuspidate. Upper petal cucullate, orbicular, abaxial midvein broadly cristata; lateral united petals not clawed, 1–1.3 cm, 2-lobed; basal lobes orbicular, small; distal lobes reflexed, obovate- orbicular or lunar; auricle indented. Filaments very short; anthers obtuse. Ovary fusiform. Capsule not seen. Fl. Aug.

- Guizhou (Gaopo Shan, Pingba).


**高贵凤仙花** gao gui feng xian hua

Plants glabrous, with large leaves. Stem erect, robust, branched. Leaves alternate, petiolate, upper ones sessile; petiole 4–5 cm, stout; leaf blade gray-green abaxially, dark green adaxially, ovate or elliptic-lanceolate, 10–15 × 4–5.5 cm, leathery, lateral veins 7 or 8 pairs, midvein and lateral veins conspicuous
abaxially, base cuneate in lower and middle leaves, rounded in upper ones, margin crenate or serrate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, 2–3-flowered; peduncles fibrous, elongate, 5–6 cm, rigid. Pedicels 1–1.5 cm, slender, bracteate at base; bracts persistent, ovate-lanceolate, 1–1.5 mm. Flowers white, purple-red striate, ca. 2.5 cm deep. Lateral sepals 2, obliquely ovate-ornicular, 0.8–1 cm in diam., inequilateral, lateral veins 5, connected at apex, apex mucronate. Lower sepal funnelform, slightly turgid, ca. 2.5 cm, gradually narrowed into an incurved spur ca. 1.5 cm; mouth ± oblique, ca. 1 cm wide, tip obtuse. Upper petal broadly obovate-ornicular, ca. 1.8 cm wide, apex obtuse, abaxial midvein cornute; lateral veins 7 pairs, base slightly cordate or cuneate, margin sharply serrate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, pendulous, or ± curved, elongate, 4–6 cm, 2–4-flowered. Pedicels spreading or pendulous, bracteate below flowers; bracts persistent, lanceolate. Flowers yellow, large, ca. 4 cm deep. Lateral sepals 2, ovate-lanceolate, 3–4 cm. Lower sepal broadly funnelform, incurved, constricted into a slender spur ca. 1 cm. Upper petal obovate, small, apex cuspidate; lateral united petals not clawed, ca. 15 cm, 2-lobed; basal lobes very small; distal lobes oblong, apex rounded. Filaments linear; anthers obtuse. Ovary fusiform, ca. 3 mm. Capsule linear, 4–6 cm. Seeds many, oblong, ca. 2.5 mm, glabrous. Fl. Aug, fr. Oct.

- Shaded moist places on slopes; ca. 1900 m. Yunnan (Yanjin).

叉开凤仙花 cha kai feng xian hua

Plants 50–70 cm tall, rigid, glabrous, with few, thick roots. Stem erect, long noded in lower part, ± simple or rarely branched. Leaves alternate, shortly petiolate; leaf blade purple-tinged abaxially, green adaxially, oblong-lanceolate or oblanceolate, 12–15 × 2–3 cm, papery, stipitate glandular-ciliate near base, lateral veins 7 pairs, base slightly cordate or cuneate, margin sharply serrate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, pendulous, or ± curved, elongate, 4–6 cm, 2–4-flowered. Pedicels spreading or pendulous, bracteate below flowers; bracts persistent, lanceolate. Flowers pink-purple, 2–2.5 cm deep. Lower sepal narrowly funnelform, 2–2.5 cm deep, gradually narrowed into an incurved spur 2–2.5 cm; mouth oblique, ca. 1.5 cm wide, tip mucronulate. Upper petal suborbicular, 1.2–1.3 cm, slightly narrowed apically, apex retuse, curvedly rostellate, abaxial midvein thickened, conspicuously carinate; lateral united petals ± clawed, 1.8–2 cm, 2-lobed; basal lobes ovate-oblong; distal lobes dolabriliform, apex obtuse or emarginate; auricle absent. Filaments linear, 3–4 mm; anthers ovoid, obtuse at apex. Ovary erect, linear, 2–3 cm. Capsule fusiform, ca. 1.5 cm. Seeds 7 or 8, yellow-brown, ovoid-oblong, ca. 2 mm, tuberculose. Fl. Jul–Aug.

- Forest understories at riversides in valleys, shaded moist places; 400–1000 m. Zhejiang.

泰顺凤仙花 tai shun feng xian hua

Plants annual, 10–20 cm tall, glabrous. Stem erect, basally pink, slender, simple, with few fibrous roots. Leaves opposite in lower part of stem, alternate in upper part of stem; petiole 0.5–1 cm; leaf blade ovate-lanceolate, 1–4 × 0.7–2 cm, membranous, without glands, lateral veins 3–5 pairs, base cuneate, margin crenate serrate, apex acuminate. Inflorescences solitary, in upper leaf axils, ca. 1.5 cm, 1-flowered. Pedicels bracteate above middle; bracts persistent, elliptic, 2–3.5 mm. Flowers pink, ca. 2.5 cm deep. Lateral sepals 2, ovate, ca. 3.5 × 2.5 mm, 3-veined, margin entire, apex conspicuously mucronulate. Lower sepal narrowly funnelform, ca. 1.8 cm deep, gradually narrowed into an incurved spur ca. 1.2 cm; mouth vertical, 5–6 mm wide, tip mucronulate. Upper petal suborbicular, 4.5 × 5 mm, apex obtuse, abaxial midvein narrowly carinate; lateral united petals ca. 8 mm, 2-lobed; basal lobes ovate-oblong; distal lobes dolabriliform, apex rounded. Filaments linear, ca. 2 mm; anthers ovoid, apex obtuse. Ovary fusiform, ca. 2 mm. Capsule (immature) fusiform. Fl. Apr.

- Shaded moist places in valleys; ca. 100 m. Zhejiang (Taishun).

198. Impatiens exiguiﬂora J. D. Hooker, Hooker’s Icon. Pl. 30: t. 2975. 1911.
鄂西凤仙花 e xi feng xian hua

Plants annual, 30–50 cm tall. Stem erect, or base ascending, green, often black spotted in lower part, succulent, simple or sometimes branched, nodes swollen in lower part, with many fibrous roots. Leaves alternate or crowded in upper part of stem; petiole 1.5–2.5 cm; leaf blade pale green abaxially, green adaxially, ovate or ovate-lanceolate, leathery, abaxially glabrous, adaxially pressed-puberulent, lateral veins 7–9 pairs, curved, prominent abaxially, base cuneate, attenuate into petiole, without glands, margin coarsely crenate, teeth mucronulate, apex acuminate. Inflorescences in middle and upper leaf axils, divaricately 2-flowered; peduncles longer than petioles, 3–5 cm. Pedicels 1–2 cm, ± puberulent, bracteate above middle; bracts persistent, setose, 3–5 mm, membranous. Flowers pink, 0.8–1.2 cm. Lateral sepals 2, subovate, 3–5 × 2–3 mm, sub-
Plants annual, 30–50 cm tall. Stem erect or rarely basally ascending, green, often black spotted in lower part, succulent, simple or sometimes branched, basal nodes swollen, with many fibrous roots. Leaves alternate, or crowded in upper part of stem; petiole 1.5–2.5 cm; leaf blade pale green abaxially, dark green adaxially, ovate or ovate-lanceolate, membranous, without basal glands, both surfaces glabrous, lateral veins 7–9 pairs, curved, base cuneate, attenuate into petiole, margin coarsely crenate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, subracemose, (1 or) 2- or 3(or 4)-flowered; peduncles conspicuously shorter than leaves, slender. Pedicels 0.5–1.2 cm, slender, bracteate at base; bracts caducous, pink, broadly ovate-cordate, ca. 8 × 7 mm, thinly membranous, ovate-mucronulate. Flowers pink, ca. 3.5 cm in diam. Lateral sepals 2, oblong-ovate, 8–9 × ca. 7 mm, apex inconspicuously mucronulate. Lower sepal narrowly funnelform, gradually narrowed into an incurved spur; spur ca. 1.8 cm, slender; mouth oblique, 8–10 mm, tip conspicuously mucronulate. Upper petal suborbicular, ca. 0.8 × 1–1.2 cm, base subcordate or rounded, apex retuse, curved rostellate, abaxial midvein narrowly carinate; lateral united petals not clawed, ca. 1.5 cm, 2-lobed; basal lobes oblong-ovate, small, apex acute; distal lobes broadly dolabrilform, ca. 1.5 cm wide, apex emarginate; auricle inflexed, subreniform. Filaments linear; anthers small, obtuse. Ovary erect, fusiform, ca. 2 mm. Capsule subclavate-linear, 1.5–1.8 cm. Seeds few, brown, oblong, rugose. Fl. and fr. Jun–Aug.

● Forest understories, shaded moist places in valleys, grasslands, along canals, roadsides on slopes; 800–1600 m. W Hubei.


封怀凤仙花 feng hua feng xian hua

Plants annual, 30–50 cm tall. Stem erect or basally ascending, green, often black spotted in lower part, succulent, simple or sometimes branched, basal nodes swollen, with many fibrous roots. Leaves alternate, or crowded in upper part of stem; petiole 1.5–2.5 cm; leaf blade pale green abaxially, dark green adaxially, ovate or ovate-lanceolate, membranous, without basal glands, both surfaces glabrous, lateral veins 7–9 pairs, curved, base cuneate, attenuate into petiole, margin coarsely crenate, teeth mucronulate, apex acuminate. Inflorescences in upper leaf axils, subracemose, (1 or) 2- or 3(or 4)-flowered; peduncles conspicuously shorter than leaves, slender. Pedicels 0.5–1.2 cm, slender, bracteate at base; bracts caducous, pink, broadly ovate-cordate, ca. 8 × 7 mm, thinly membranous, ovate-mucronulate. Flowers pink, ca. 3.5 cm in diam. Lateral sepals 2, oblong-ovate, 8–9 × ca. 7 mm, apex inconspicuously mucronulate. Lower sepal narrowly funnelform, gradually narrowed into an incurved spur; spur ca. 1.8 cm, slender; mouth oblique, 8–10 mm, tip conspicuously mucronulate. Upper petal suborbicular, ca. 0.8 × 1–1.2 cm, base subcordate or rounded, apex retuse, curved rostellate, abaxial midvein narrowly carinate; lateral united petals not clawed, ca. 1.5 cm, 2-lobed; basal lobes oblong-ovate, small, apex acute; distal lobes broadly dolabrilform, ca. 1.5 cm wide, apex emarginate; auricle inflexed, subreniform. Filaments linear; anthers small, obtuse. Ovary erect, fusiform, ca. 2 mm. Capsule subclavate-linear, 1.5–1.8 cm. Seeds few, brown, oblong, rugose. Fl. and fr. Jun–Aug.

● Forest understories, shaded moist places in valleys, grasslands, along canals, roadsides on slopes; 800–1600 m. W Hubei.


婺源凤仙花 wu yuan feng xian hua

Plants annual, 30–50 cm tall, striate, glabrous. Stem erect or base prostrate, laxly branched, robust, naked and nodes swollen in lower part. Leaves alternate; petiole 3–6 cm; leaf blade pale green abaxially, dark green adaxially, ovate-lanceolate, 8–15(–20) × 2.5–5.5 cm, submembranous, with stipitate setose glands above middle, glabrous, lateral veins 9–11 pairs, curved, base cuneate, margin crenate-serrate or crenate, teeth incurved-mucronulate, apex shortly ciliate or acuminate. Inflorescences axillary, subumbellate, 2- or 3-flowered; peduncles shorter than leaves, stout. Pedicels 1.5–2.5 cm, slightly elongate at anthesis, bracteate at base; bracts pink, ovate-lanceolate, 10–12 × 4–6 mm, thinly membranous, conspicuously cuspitate. Flowers pink, 3.5–4 cm deep. Lateral sepals 2, broadly ovate or suborbicular, large, 1.5 × 1–1.4 cm, 5-veined, margin entire, apex shortly cuspitate, abaxial midvein narrowly carinate. Lower sepal broadly funnelform, gradually narrowed into a curved or involute spur 3–4 cm; mouth vertical, ca. 2 cm wide, tip acuminate. Upper petal suborbicular, 1.6–1.8 cm in diam., thinly membranous, apex retuse, rostellate, abaxial midvein thickened, crista; lateral united petals clawed, 2–2.5 cm, 2-lobed; basal lobes oblong-obovate, small, 7–8 mm, apex rounded; distal lobes broadly dolabrilform, 1.2–1.3 × 1–1.2 cm, apex obtuse; auricle inflexed, subreniform. Filaments linear; ca. 5 mm; anthers ovoid, apex obtuse. Ovary erect or slightly curved, fusiform, ca. 5 mm. Capsule linear-cylindric, 2.5–3 cm. Seeds few, brown, subglobose, compressed, ca. 3 mm in diam., rugose. Fl. Aug–Oct.

● Forest understories, forest margins, along canals; ca. 1000 m. Jiangxi, Zhejiang.


闊瓣凤仙花 kuo e feng xian hua

Impatiens platysepala var. kuocangshanica X. F. Jin & F. G. Zhang.

Plants annual, 30–50 cm tall, striate, glabrous. Stem erect or base prostrate, laxly branched, robust, naked and nodes swollen in lower part. Leaves alternate; petiole 3–6 cm; leaf blade pale green abaxially, dark green adaxially, ovate-lanceolate, 8–15(–20) × 2.5–5.5 cm, submembranous, with stipitate setose glands above middle, glabrous, lateral veins 9–11 pairs, curved, base cuneate, margin crenate-serrate or crenate, teeth incurved-mucronulate, apex shortly ciliate or acuminate. Inflorescences axillary, subumbellate, 2- or 3-flowered; peduncles shorter than leaves, stout. Pedicels 1.5–2.5 cm, slightly elongate at anthesis, bracteate at base; bracts pink, ovate-lanceolate, 10–12 × 4–6 mm, thinly membranous, conspicuously cuspitate. Flowers pink, 3.5–4 cm deep. Lateral sepals 2, broadly ovate or suborbicular, large, 1.5 × 1–1.4 cm, 5-veined, margin entire, apex shortly cuspitate, abaxial midvein narrowly carinate. Lower sepal broadly funnelform, gradually narrowed into a curved or involute spur 3–4 cm; mouth vertical, ca. 2 cm wide, tip acuminate. Upper petal suborbicular, 1.6–1.8 cm in diam., thinly membranous, apex retuse, rostellate, abaxial midvein thickened, crista; lateral united petals clawed, 2–2.5 cm, 2-lobed; basal lobes oblong-obovate, small, 7–8 mm, apex rounded; distal lobes broadly dolabrilform, 1.2–1.3 × 1–1.2 cm, apex obtuse; auricle inflexed, subreniform. Filaments linear; ca. 5 mm; anthers ovoid, apex obtuse. Ovary erect or slightly curved, fusiform, ca. 5 mm. Capsule linear-cylindric, 2.5–3 cm. Seeds few, brown, subglobose, compressed, ca. 3 mm in diam., rugose. Fl. Aug–Oct.

● Forest understories, forest margins, along canals; ca. 1000 m. Jiangxi, Zhejiang.

淡黄凤仙花  dan huang feng xian hua

Plants annual, 30–40 cm tall, glabrous. Stem erect, simple or slightly branched in upper part, long naked, often swollen in nodes in lower part, with few fibrous roots. Leaves alternate, petiolate; leaf blade pale green abaxially, dark green adaxially, ovate-oblong or elliptic, 5–12 × 3–4 cm, membranous, often with 3 or 4 pairs of stipitate basal glands, both surfaces glabrous, lateral veins 7–9 pairs, curved, midvein ± conspicuous abaxially, base cuneate, margin crenate-serrate, apex acuminate. Inflorescences in upper leaf axils, subumbellate, 3-flowered, sometimes 2-flowered; peduncles conspicuously shorter than petals, 5–10 mm. Pedicels slightly curved, 7–10 mm, slender, slightly swollen above, bracteate at base; bracts persistent, yellow-green, lanceolate, 6–7 × 2–3 mm, membranous, apex falcate-acuminate. Flowers yellow-green, 1.5–2 cm in diam. (not open). Lateral sepals 2, suborbicular, large, ca. 1.8 × 1.2 cm, thinly membranous, apex emarginate, acute, abaxial midvein thickened, narrowly carinate. Lower sepal deep yellow, navicular, ca. 1 cm deep, abruptly narrowed into an incurved spur ca. 1 cm; mouth vertical, ca. 1 cm wide, tip acute. Upper petal broadly elliptic, 1.2–1.3 × 1–1.2 cm, abaxial midvein conspicuously thickened, green Cristate; lateral united petals not clawed, 8–9 mm, 2-lobed; basal lobes ovate-oblong, small, obtuse; distal lobes orbicular-dolabrina; auricle inflexed, ovate. Filaments linear, ca. 3 mm; anthers ovoid, apex obtuse. Ovary fusiiform. Capsule not seen. Fl. May.

● Forests, shaded moist places along canals; 500–700 m. Zhejiang (Suichang).


扭萼凤仙花  niu e feng xian hua

Plants annual, 40–50 cm tall, with few supporting roots, glabrous. Stem erect; branchlets spreading, slender. Leaves alternate; petiole 5–12 mm, without glands; leaf blade pale green abaxially, dark green adaxially, oblong or ovate-oblong, 10–15 (–20) × 3–6 cm, submembranous, not setose between teeth, lateral veins 6 or 7 pairs, curved, prominent abaxially, margin crenate, teeth mucronulate, apex acuminate or caudate-acuminate. Inflorescences in upper leaf axils or terminal of branchlets, racemose, 6–8–flowered; peduncles suberect, shorter than leaves, 6–7 cm. Pedicels spreading, 1–1.5 cm, elongate at fruiting, bracteate at base; bracts persistent, subulate, 2–3 mm, apex acute. Flowers yellow, ca. 4 cm deep. Lateral sepals 2, reniform-orbicular, ca. 5 × 3–4 mm, tortuous, membranous, apex cuspidate. Lower sepal saccate, to 2 cm deep, abruptly narrowed into an incurved spur; spur ca. 1.5 cm; mouth oblique, 1–1.5 mm wide, tip acute. Upper petal reniform, ca. 1.5 cm, apex rostellate, abaxial midvein thickened, carinate; lateral united petals broadly clawed, 2–2.5 cm, 2-lobed; basal lobes orbicular, small; distal lobes dolabrina; longer, apex rounded; auricle inflexed, purple spotted. Filaments short, broad; anthers ovoid, apex acute. Ovary erect, fusiform. Capsule linear, 4–5 cm. Seeds many, brown, oblong-obovoid, ca. 4 mm. Fl. Aug–Sep.

● Shaded moist places in valleys; 1500–2900 m. Sichuan (Hongya, Luding, Tianquan).


天目山凤仙花  tian mu shan feng xian hua

Plants annual, 40–50 cm tall, glabrous. Stem erect or slightly curved in upper part, laxly branched, base 5–7 mm in diam., nodes swollen in lower part, with few supporting roots and many fibrous roots. Leaves alternate, petiolate, in upper part smaller, shortly petiolate or subsessile; petiole 1.5–3 cm; leaf blade oblong or ovate-elliptic, 7–12 × 3–5 cm, membranous, lateral veins 7–9 pairs, curved, base broadly cuneate or suborbicular, margin crenate-serrate, teeth mucronulate, apex caudate-acuminate. Inflorescences in upper leaf axils, race-mose, (4 or) 5–7-flowered; peduncles 3–5 cm. Pedicels 1–1.5 cm, slender, elongate at fruiting, bracteate at base; bracts persistent, ovate-lanceolate, 2–3 mm, herbaceous, apex glandular-mucronulate. Flowers purple-pink, large, 3–3.5 cm deep. Lateral sepals 2, broadly ovate, ca. 4 × 3 mm, 3–5-veined, apex mucronulate, abaxial midvein not thickened. Lower sepal funneliform, 2–2.5 cm, gradually narrowed into an incurved, 2-fid spur 1–4 cm; mouth subvertical, ca. 1.5 cm wide, tip acuminate. Upper petal suborbicular, 8–10 mm, apex emarginate, curved-mucronulate, abaxial midvein thickened, conspicuously carinate; lateral united petals clawed, ca. 2.3 cm, 2-lobed; basal lobes obovate-oblong; distal lobes dolabrina, large, obtuse; auricle inflexed, triangular. Filaments linear, ca. 3 mm; anthers ovoid, apex obtuse. Ovary erect, fusiform. Capsule linear-fusi-form, 2–2.5 cm. Fl. and fr. Aug.

● Forest understories, humid moist stony places; 800–1000 m. Zhejiang.

1a. Spur of lower sepal ca. 1 cm ...... 204a. var. tienmushanica
1b. Spur of lower sepal ca. 4 cm ...... 204b. var. longicalcarata

204a. Impatiens tienmushanica var. tienmushanica

天目山凤仙花(原变种) tian mu shan feng xian hua (yuan bian zhong)

Spur of lower sepal ca. 1 cm.

● Understories of forests on slopes, humid moist stony places; ca. 800 m. Zhejiang.


长距天目山凤仙花 chang ju tian mu shan feng xian hua

Spur of lower sepal ca. 4 cm.

● Forest understories; ca. 1000 m. Zhejiang (Suichang).


九龙山凤仙花  jiu long shan feng xian hua

Plants annual, 18–55 cm tall, glabrous. Stem erect, simple. Leaves alternate, petiolate, crowded in upper part of stem, shortly petiolate; petiole 2–4 cm; leaf blade ovate-elliptic, 10–15 × 3–5 cm, membranous, with 2 or 3 setose basal glands, setose between teeth, lateral veins 7–9 pairs, base cuneate, margin crenate, apex shortly caudate. Inflorescences in upper leaf
axes, racemose, 4–6-flowered; peduncles erect, 3–5.5 cm, stout. Pedicels 8–17 mm, slender, bracteate at base; bracts caducous, broadly ovate, ca. 3 mm, membranous, apex cuspidate. Flowers white, ca. 3.5 cm deep. Lateral sepals 2, ovate, ca. 5 × 3 mm, apex mucronulate. Lower sepal funnelform, 2.5–2.8 cm deep, gradually narrowed into an erect spur 1.5–1.8 cm; mouth vertical, 1–1.2 cm wide, tip acute. Upper petal suborbicular, ca. 7 × 6 cm, apex emarginate, abaxial midvein slightly thickened, narrowly carinate; lateral united petals clawed, 1.6–1.8 cm, 2-lobed; basal lobes broadly triangular; distal lobes lanceolate, apex acute; auricle absent. Filaments linear, ca. 3 mm; anthers ovoid, apex obtuse. Ovary linear, 3–4 mm. Capsule linear-cylindrical, ca. 3.5 cm. Seeds many, brown, oblong, 3–4 mm, rugose.

- Forest understories; 1000–1400 m. S Zhejiang (Suichang).


Plants annual, 30–60 cm tall, glabrous. Stem erect, terete, few branched. Leaves alternate; petiole 1–3.5 cm; leaf blade pale green abaxially, dark green adaxially, elliptic or lanceolate-elliptic, 5–14 × 2–5 cm, with bristles between teeth, lateral veins 5 or 6 pairs, base cuneate, margin crenate, teeth mucronulate, apex caudate-acuminate. Inflorescences terminal or axillary, racemose, 3–6-flowered; peduncles 3–8 cm, slender. Pedicels 1–5 mm, slender, 1-bracteate at base; bract caducous, ovate-lanceolate, ca. 4 mm. Flowers yellow. Lateral sepals 2, elliptic, ca. 5.5 mm. Lower sepal saccate, constricted into an erect or incurved spur ca. 2.2 cm. Upper petal obovate, ca. 6.5 mm, apex obtuse, mucronulate; lateral united petals not clawed, subovate, 9–17 mm, unequally 2-lobed; basal lobes broadly ovate, short; distal lobes oblong. Filaments compressed, 4–5.5 mm; anthers obtuse. Ovary linear, ca. 5 mm. Capsule elongate, 2–2.5 cm. Seeds many, oblong, ca. 3 mm, granulose. Fl. and fr. Jul.

- Forest understories, shaded places at mountain summits; 2000–2100 m. Taiwan.


Plants annual, 10–40 cm tall, slender, glabrous, with few supporting roots and fibrous roots. Stem erect, many branched in lower part; branchlets opposite or subopposite. Leaves alternate, petiolate on lower stem, sessile at middle and upper stem; petiole 1.5–3.5 cm, slender; leaf blade pale green abaxially, green adaxially, broadly ovate, ovate-oblong, rhombic, or suborbicular, 1.5–3 × 1–2 cm, rarely 5–6 × 2–2.5 cm, membranous, lateral veins 5–7 pairs, base broadly cuneate or rounded-auriculate, cordate-amplexicaul, margin shallowly undulate-crenate or nearly entire, apex rounded or obtuse in lower part of stem. Inflorescences in upper leaf axils, 1- or 2-flowered; peduncles shorter than leaves, 1.5–2 cm. Pedicels 5–15 mm, linear, bracteate below flowers; bracts ± persistent, ovate or ovate-lanceolate, ca. 2 mm, membranous, apex acuminate. Flowers white, ca. 1 cm or smaller. Lateral sepals 2, broadly ovate, 2–3 mm, 3–5-veined, apex scarcely mucronulate. Lower sepals nectarivorous, (4.5–)6–7 mm; mouth vertical, 5–6 mm wide, with an included spur; spur incurved, 1–1.5 mm. Upper petal orbicular, (3.5–)5–6 mm, cucullate, apex emarginate, mucronulate; lateral united petals not clawed, (7.5–)9–10 mm, 2-lobed; basal lobes obliquely ovate, ca. 3.5 mm, apex obtuse; distal lobes oblong-lanceolate to elliptic, ca. 2 × as long as basal lobe, apex obtuse; auricle absent. Filaments slightly compressed; anthers obtuse. Ovary erect, fusiform, 3–4 mm. Capsule linear, 2.5–4 cm. Seeds many, brown, turbulente. Fl. Aug. fr. Sep.

- Understories of alpine Quercus or Abies forests, grasslands on slopes, along canals; 2700–4000 m. SW Sichuan, SE Xizang, NW Yunnan.


Plants annual, 5–10 cm tall, soft. Stem very slender, succulent, opposite-branched at middle part, rarely simple, often with 1 pair of suborbicular leaves at middle. Leaves alternate, petiolate; leaf blade ovate or broadly ovate, 1–3 × (0.8–)1.7 cm, thinly membranous, without glands, lateral veins 3 or 4 pairs, base broadly cuneate or truncate, glands absent, margin remotely coarsely crenate, apex shortly acute, mucronulate. Inflorescences axillary, 1-flowered; peduncles ca. as long as petioles or longer, often pendulous. Pedicels bracteate below flowers; bracts persistent, ovate, ca. 2 × 1 mm, submucronate, 1-veined, apex acuminate. Flowers yellow, with a brown-purple lower sepal, smaller, ca. 8 mm deep. Lateral sepals oblong or ovate-oblong, 5–6 × ca. 2.5 mm, thinly membranous, apex cuspidate, abaxial midvein slightly turgid-carnate. Lower sepal purple-brown striate, navicular, 4–5 mm deep, without a spur. Upper petal white, suborbicular, ca. 8 mm in diam., base slightly cordate, apex rostellate, abaxial midvein narrowly carinate; lateral united petals ± clawed, 2.5–3 cm, 2-lobed; basal lobes ovate-lanceolate, apex acuminate; distal lobes oblong-lanceolate, ca. 3 × as long as basal lobes, broader, apex elongate into a linear thread 1.7–1.8 cm; auricle inflected, obliquely triangular. Filaments linear, 4–6 mm; anthers obtuse. Ovary fusiiform, ca. 4 mm. Capsule not seen. Fl. Aug.

- Forest understories, stony places; ca. 2800 m. SW Sichuan (Muli).
Plants annual, 30–65 cm tall, glabrous. Stem erect or basally ascending, striate when dry, succulent, branched, lower nodes swollen, with many fibrous roots. Leaves alternate, petiolate, crowded in upper part of stem; leaf blade pale green abaxially, dark green adaxially, elliptic or ovate-elliptic, 6–12 × 3.5–5.8 cm, membranous, with 2–4 pairs of stipitate basal glands, lateral veins 5 or 6 pairs, curved, base cuneate, margin coarsely crenate or crenate-serrate, teeth mucronulate, apex shortly acute or acuminate. Inflorescences in upper leaf axils, 1-flowered. Pedicels 1–1.5 cm, slightly elongate at fruiting, slender, bracteate above middle; bracts persistent, linear, 1.5–2.5 mm, or ovate, 4–5.5 mm, apex acuminate. Flowers yellow, 2.5–3 cm deep. Lower sepals 2, purple spotted, obliquely ovate or suborbicular, 8–10 × 8–9 mm, abaxial midvein thickened, broadly carinate, inequilateral, margin 4(or 5)-denticulate on one side, apex acute. Lower sepal saccate, ca. 3 cm deep, abruptly constricted into 2 or 3 spurs; spurs incurved, 3.5–5 mm, 2-lobed, appearing as if 4–6 spurs; mouth oblique, 1.8–2 cm, tip acuminate. Upper petal suborbicular, 1.1–1.2 × 1.3–1.4 cm, base broadly cuneate, apex rounded, rostellate, abaxial midvein thickened, cristate at middle; lateral united petals clawed, 2.8–3 cm, 2-lobed; basal lobes oblong, small, 4.5–6 × ca. 4 mm, apex rounded, with a long, filamentous hair 6–7 mm; distal lobes oblong-dolabiform, 2.2–2.5 × 1.1–3 mm, apex acute, without a filamentous hair; auricle broad. Filaments linear; anthers ovoid, apex obtuse. Ovary fusiform, 4–5 mm. Capsule linear-cylindric, 3–4 cm. Seeds many, brown, oblong-globose, ca. 2 mm, verruculose. Fl. and fr. Aug–Oct.

- Forest margins, shaded moist places by streams in valleys; 1400–1800 m. Henan.


撕裂萼凤仙花 lie ju e feng xian hua

Plants annual, 40–90 cm tall. Stem erect, slender, branched in upper part of stem. Leaves alternate; petioles of lower leaves longer, gradually shorter in upper leaves; leaf blade ovate-oblong or ovate-lanceolate, 4–7 × 2–3 cm, often few ciliate basal glands, base cuneate, margin coarsely crenate, teeth mucronulate, apex caudate-acuminate. Inflorescences in upper leaf axils, 1-flowered; peduncles 3–4 cm. Pedicels bracteate above middle; bracts narrowly lanceolate. Flowers yellow or orange-yellow. Lower sepals 2, subovate-orbicular, apex mucronulate. Lower sepal brown spotted, saccate, narrowly into a hooked spur; spur short, 2-lobed; apex acute. Upper petal suborbicular, ca. 1.5 cm in diam., apex rostellate, abaxial midvein broadly thickened, cristate; lateral united petals clawed, 2-lobed; basal lobes oblong, smaller, apex with a filamentous long hair; distal lobes dolabiform, large, 2.5–3 cm, apex acute. Anthers obtuse. Capsule elliptic. Fl. Aug–Sep.

- Forests, shaded moist places in valleys; 1200–2100 m. Gansu, Henan, Shaanxi.


撕裂萼凤仙花 lie ju e feng xian hua

Plants annual, 60–90 cm tall. Stem robust, branched, conspicuously striate when dry. Leaves alternate, petiolate; leaf blade elliptic or elliptic-ovate, rarely ovate-lanceolate, 3–8 × 1.5–2.5(–3) cm, membranous, with 2 or 3 pairs of stipitate basal glands, abaxially sparsely pilose on veins, lateral veins 8 or 9 pairs, base broadly cuneate or subrounded, margin coarsely crenate, apex long acuminate. Inflorescences in upper leaf axils, 1-flowered; peduncles (0.8–)1–1.5 cm. Pedicels bracteate above middle; bracts persistent, oblong-ovate, 5–6 mm, abaxially pilose on veins, 5–7-veined. Flowers yellow, large, to 4.5 cm deep. Lower sepals 2, orbicular or slightly cordate, margin irregularly fimbriate-lacerate, 7–9–veined; midvein and other veins abaxially thickened, narrowly carinate, irregularly laciniate. Lower sepal striate, deeply saccate, to 3 cm deep, abruptly narrowed into a hooked, incurved spur; spur short, 5–6 mm, 2-lobed. Upper petal orbicular, 1.3–1.4 cm in diam., abaxial midvein broadly cristate, crista 2-lobed; basal lobe large, rounded; distal lobes small, undulate, apex mucronulate; lateral united petals ± clavate, 2–2.2 cm, 2-lobed; basal lobes orbicular; distal lobes oblong-dolabiform, 2 × as long as basal lobes; auricle rounded. Filaments 3–5 mm; anthers suborbicular, apex obtuse. Ovary fusiform. Capsule linear, ca. 2.5 cm, papillose. Seeds 7 or 8, brown, subglobose, compressed, ca. 2 mm, glabrous, ± smooth. Fl. Aug–Sep.

- Shaded moist places in valleys; ca. 1600 m. S Gansu, NE Sichuan.


宽距凤仙花 ku an ju feng xian hua

Plants annual, 30–100 cm tall, or higher. Stem erect, branched. Leaves alternate; petioles longer in lower leaves, gradually shorter to subsessile in upper leaves; leaf blade pale green abaxially, green adaxially, ovate or lanceolate-ovate, 7–12 × 4–6 cm, with few pairs of denticulate basal glands, abaxially sparsely pilose on veins, base slightly cordate or obtuse-rounded, margin coarsely crenate, apex caudate acuminate. Inflorescences in upper leaf axils, 1–4–flowered. Pedicels 2–3 cm, slender, bracteate above middle; bracts narrowly ovate, ca. 3 mm. Flowers pale purple, large, 2–3 cm deep. Lower sepals 2, broadly ovate or suborbicular, 5–6 mm, thinly membranous, margin irregularly lacerate, apex acute. Lower sepal purple-brown spotted, saccate, ca. 1 × 2 cm, narrowed into an incurved spur; spur short, 2-lobed. Upper petal broadly reniform, ca. 1.2 cm, apex mucronulate, abaxial midvein cristate; lateral united petals ca. 2 cm, 2-lobed; basal lobes oblong, small, apex with a
filamentous long hair; distal lobes dolabriform, large, apex acute. Anthers obtuse. Capsule linear, ca. 8 mm. Fl. Jul–Aug.

- Forest understories, shaded moist places; 2000–3200 m. Gansu, Hubei, Sichuan.


东俄洛凤仙花  dong e luo feng xian hua

Plants annual, ca. 60 cm tall, glabrous. Stem erect, branched in lower part; branches and branchlets erect. Leaves alternate; petiole 1–3 cm; leaf blade ovate, 4–7 × 3–3.5 cm, lateral veins 6 or 7 pairs, fine, base cuneate, attenuate into petiole, margin crenate or crenulate, teeth mucronulate, apex acute. Inflorescences 1–3-flowered; peduncles very short. Pedicels short, bracteate at middle; bracts ovate, apex long mucronulate. Flowers white, small. Lateral sepals 2, broadly ovate-cordate, ca. 1 cm wide, membranous, apex acuminate, abaxial midvein crisate. Lower sepals funnelform or subsaccate, narrowed into a 2-lobed, long spur; mouth subvertical, ca. 1.5 cm. Upper petal orbicular, 1–1.5 cm, apex long aristate, abaxial midvein broadly cristate; lateral united petals 1.2–2.5 cm, long and broadly clawed, 2-lobed; basal lobes ovate, small, with a filamentous long hair; distal lobes narrowly or broadly dolabriform, very large, apex with long filamentous hairs; abaxial auricle inflexed. Filaments short, broad; anthers obtuse. Ovary erect, fusiform. Fl. Sep.

- By streams in valleys; 2100–2400 m. W Sichuan.


紫萼凤仙花  zi e feng xian hua

Plants annual, ca. 60 cm tall, glabrous, with few supporting roots. Stem erect, green or sometimes purple-tinged, robust, branched. Leaves alternate; petiole 2–5 cm, upper leaves subsessile; leaf blade pale green or sometimes purple abaxially, green adaxially, ovate-oblong, ovate, or ovate-lanceolate, 6–15 × 3–4.5 cm, submembranous, glabrous, lateral veins 7 or 9 pairs, base cuneate, narrowed, or cordate, margin coarsely crenate-serrate, teeth retuse, mucronulate, apex acuminate or caudate-acuminate. Inflorescences terminal at apices of branches, 1- or 2(3)-flowered; peduncles 0.5–2 cm, slender. Pedicels short, 0.5–1 cm, bracteate above middle; bracts persistent, ovate or ovate-lanceolate, 3–4 × ca. 2 mm, apex acuminate. Flowers usually bicolored, large, 3–4 cm deep. Lateral sepals 2, brown to purple-red when dry, purple spotted, orbicular, 1.3–1.5 cm wide, shiny, many veined, abaxial midvein not thickened. Lower sepal deeply saccate, 2.5–3 cm deep, abruptly narrowed into an incurved spur; spur short, 2-lobed; mouth subvertical or slightly ascending, tip acute. Upper petal purple or yellow, orbicular, ca. 1.5 cm, apex retuse, mucronulate, abaxial midvein thickened, broadly cristate; lateral united petals not clawed, 2.5–3 cm, 2-lobed; basal lobes orbicular, apex with a filamentous long hair; distal lobes dolabriform, longer, with a long filamentous hair; auricle inflexed, narrow. Filaments short, broad; anthers obtuse. Ovary erect, fusiform. Capsule linear, 2.5–4 cm. Seeds many, oblong, 2–3 mm. Fl. Aug–Sep, fr. Oct.

- Forest margins, thickets, moist places, roadsides; 700–2500 m. Sichuan (Emei Shan).


条纹凤仙花  tiao wen feng xian hua

Plants annual, ca. 60 cm tall, glabrous. Stem erect, branched. Leaves alternate, petiolate in lower leaves, subsessile in upper ones; petiole 1–3 cm; leaf blade ovate-lanceolate, 7–10 × 2.5–3.5 cm, membranous, lateral veins 5 or 6 pairs, fine, base acute, margin crenate, teeth mucronulate, apex acuminate or caudate. Inflorescences in upper leaf axils, 1-flowered; peduncles ca. 1 cm. Pedicels bracteate at middle; bracts ovate, apex acute. Lateral sepals 2, pale green, orbicular, 1.2–1.5 cm in diam., abaxial midvein with a small sac at base. Lower sepal saccate, ca. 3 cm, narrowed into an incurved spur; spur short, 2-lobed; mouth subvertical, tip acute or acuminate. Upper petal orbicular, abaxial midvein large, cristate; lateral united petals broadly clawed, ca. 2.8 cm, 2-lobed; lobes with a filamentous long hair at apex; basal lobes densely purple spotted; distal lobes purple striate; auricle rounded. Filaments linear, short; anthers obtuse. Ovary erect, linear. Capsule unknown. Fl. Aug–Sep.

- Forest margins, shaded moist places; 1500–2000 m. W Sichuan.

217. Impatiens robusta J. D. Hooker, Hooker’s Icon. Pl. 30: t. 2970. 1911.

粗状凤仙花  cu zhuang feng xian hua

Plants annual, glabrous. Stem robust, succulent; branches and branchlets ascending, gradually slender. Leaves alternate, petiolate, or subsessile in upper leaves; petiole 1–7 cm; leaf blade green, ovate or orbicular, large, 5–15 × 3–4 cm, thinly membranous, lateral veins 8–10 pairs, base rounded or cuneate, attenuate into petiole, margin coarsely crenate or crenate-serate, apex acute or acuminate, sometimes caudate. Inflorescences in upper leaf axils, 1- or 2-flowered; peduncles 2–3 cm. Pedicels short, bracteate at middle or above; bracts ovate-lanceolate or linear-lanceolate, 3–5 mm. Flowers large, ca. 4 cm deep. Lower sepals 2, green, orbicular, 1–1.5 cm in diam., apex acuminate, abaxial midvein fine, turgid. Lower sepals saccate or saccate-funnelform, ca. 4 cm, gradually narrowed into a truncate or 2-lobed spur; spur short, 5–10 mm; mouth ascending, ca. 2 cm wide, tip acuminate. Upper petal orbicular or reniform, 1.4–1.6 cm wide, abaxial midvein narrowly cristate, apex acutely hooked; lateral united petals not clawed, 2.5–2.8 cm, 2-lobed; basal lobes oblolute, apex with a filamentous long hair; distal lobes broadly dolabroform, apex acuminate, with a long filamentous hair; auricle inflexed. Filaments short, broad; anthers obtuse. Ovary erect, linear. Capsule (immature) linear. Fl. Jul.

- Forest margins.


康定凤仙花  kang ding feng xian hua

Plants glabrous. Stem erect; branches and branchlets erect or ascending, long, slender. Leaves alternate; petiole 1–5 cm,
slender; leaf blade ovate, rarely oblong or orbicular, 5–9 × 2.5–3 cm, rigid, lateral veins 5–7 pairs, base rounded or acute, attenuate into petiole, margin coarsely crenate, teeth obtuse, apex acute or acuminate. Inflorescences 1–3-flowered; peduncles short, slender. Pedicels bracteate at middle; bracts ovate, very small, lateral veins 5–7 pairs, margin entire or denticulate, apex acuminate. Flowers yellow, ca. 2.5 cm wide. Lateral sepals 2, broadly ovate, rarely orbicular, 0.8–1 cm, apex acuminate, abaxial midvein narrowly carinate. Lower sepal funnelform, gradually narrowed into a spur; spur ca. as long as or longer than limb, stout, 2-lobed; mouth vertical, tip acuminate. Upper petal orbicular, 2–2.2 cm in diam., apex truncate or rostellate, abaxial midvein narrowly cristate; lateral united petals ± clawed, ca. 2.8 cm, 2-lobed; basal lobes ovate, apex acuminate, with a filamentous long hair; distal lobes dolabroform, ca. 2 × as long as basal lobes, apex rounded or with a seta; auricle inflexed, narrow. Filaments longer; anthers small, obtuse. Ovary fusiform. Capsule subsessile, narrowly linear-oblong, ca. 3 cm. Seeds many, oblong, 4–4.5 mm, rugose. Fl. and fr. Jul–Oct.

- Mixed forests, thickets, moist places by canals; 1400–3000 m. Sichuan.


短柄凤仙花 duan bing feng xian hua

Plants annual, ca. 50 cm tall, glabrous. Stem simple, long naked in lower part, robust, laxly leafy in upper part. Leaves alternate; petiole 3–5 cm; leaf blade ovate, 6–10 × 3–4 cm, membranous, without or with basal glands, both surfaces glabrous, setose between teeth, lateral veins 5–7 pairs, base rounded or cuneate, margin coarsely crenate, apex acuminate. Inflorescences 1-flowered; peduncles very short. Pedicels with bracts subulate. Flowers white, ca. 3 cm wide. Lateral sepals 2, orbicular, 1–2 cm wide, 7-veined, abaxial midvein acutely carinate. Lower sepal funnelform, ca. 3 cm deep, narrowed into a 2-lobed, incurved spur ca. 1/2 as long as limb; mouth oblique, broad, tip acuminate. Upper petal orbicular, corolla, abaxial midvein broadly thickened, carinate; lateral united petals broadly clawed, ca. 2.7 cm, 2-lobed; basal lobes orbicular, apex narrow, involute, long mucronulate for ca. 4 cm; distal lobes broadly dolabroform, ca. 2 × as large as basal lobes; auricle inflexed, large. Filaments short; anthers obtuse. Ovary striate, narrow. Capsule unknown. Fl. Aug–Sep.

- Forest margins, shaded moist places; 1500–1800 m. Sichuan (Ebian, Emei Shan).


慕索凤仙花 mu suo feng xian hua

Plants annual, small, glabrous. Stem erect, robust, often virgately branched; branchlets 10–20 cm, leafy. Leaves alternate, shortly petiolate with petiole 3–5 mm in lower leaves; leaf blade ovate, 2–5 cm, with basal glands, lateral veins 4–6 pairs, fine, base rounded or cuneate, attenuate into petiole, margin crenate or crenulate, teeth mucronulate, apex acute; blades of upper leaves ovate or oblong, base subcordate, margin with stipitate glands. Inflorescences 1- or 2-flowered; peduncles 5–10 mm. Pedicels short, bracteate at middle; bracts ovate, apex acuminate or aristate. Flowers white, 1.5–2 cm wide. Lateral sepals 2, orbicular, ca. 8 mm in diam., apex mucronulate, abaxial midvein narrowly carinate. Lower sepal funnelform, limb 2–2.5 cm deep, base narrowed into an incurved spur; spur slender, 2-lobed; mouth vertical, tip acute. Upper petal orbicular, ca. 1.4 cm in diam., abaxial midvein broadly carinate; lateral united petals broadly clawed, 3–3.5 cm, 2-lobed; basal lobes ovate, small, apex with a filamentous long hair; distal lobes dolabroform, very large, curved, apex rounded; auricle inflexed, long. Filaments linear, short; anthers obtuse. Ovary erect, fusiform. Capsule sub sessile, narrowly linear-oblong, ca. 3 cm. Seeds many, oblong, 4–4.5 mm, rugose. Fl. and fr. Jul–Oct.

- Shaded moist places by canals; 1400–3000 m. Sichuan (Kangding).


错那凤仙花 cuo na feng xian hua

Plants annual, 30–50 cm tall. Stem erect, often curved, branched in lower part, glabrous. Leaves alternate, petiolate or sub sessile in upper leaves; petiole 3–8 mm; leaf blade elliptic or ovate-lanceolate, 4–8 × 1.5–3.2 cm, membranous, often with few fibrous glands on basal margin, lateral veins 7–9 pairs, base rounded or sub rounded, margin crenate, teeth retuse and mucronulate, apex acuminate or caudate. Inflorescence solitary, axillary, 1- or 2-flowered; peduncles often shorter than leaves. Pedicels 1–1.5 cm, slender, bracteate at middle; bracts persistent, ovate or ovate-lanceolate, 3–4 mm, apex long acuminate. Flowers yellowish, large, 2.5–3 cm deep. Lateral sepals 2, broadly ovate or suborbicular, ca. 1 cm, hyaline margined, margin entire, apex cuspidate, abaxial midvein slightly thickened, carinate. Lower sepal shortly saccate, abruptly narrowed into an incurved spur; spur 4–5 mm, 2-lobed; mouth vertical, tip acuminate. Upper petal suborbicular, 1.2–1.3 cm in diam., hyaline margined, margin entire, abaxial midvein obtusely carinate; lateral united petals not clawed, 1.5–1.7 cm, 2-lobed; basal lobes ovate-lanceolate, small, apex with a filamentous long hair; distal lobes dolabroform, apex obtuse or slightly acute; auricle inflexed, subovate. Anthers obtuse. Ovary erect, fusiform. Capsule linear-oblong, ca. 2.5 cm. Seeds few, brown, oblong, ca. 4 mm, smooth. Fl. Jul–Aug.

- Forest margins, grasslands on slopes; 2700–2800 m. SE Xizang (Cona).

222. Impatiens walheimiana J. D. Hooker, Hooker’s Icon. Pl. 30: t. 2971. 1911.

瓦氏凤仙花 wa shi feng xian hua

Plants glabrous. Stem erect; branches and branchlets ascending. Leaves alternate; petiole 3–5 cm, stout; leaf blade ovate, 6–10 cm, membranous, often with stipitate glands at basal margin, lateral veins 5–7 pairs, fine, bases of lower and middle leaves cuneate or narrowly cuneate, attenuate into petiole, base of upper ones rounded, margin coarsely crenate-ser rate, apex caudate-acuminate. Inflorescences in upper leaf axils, 2-flowered; peduncles 3–4 cm. Pedicels very short, bracteate at middle. Flowers spreading, large, ca. 4 cm deep. Lateral sepals 2, ovate, ca. 1.4 cm, base cordate, apex aristate-acuminate,
abaxial midvein thickened, carinate below middle. Lower sepal broadly funnelform, ca. 2.5 cm deep, gradually narrowed into an incurved spur; spur shorter than limb, 2-lobed; mouth subvertical, ca. 2.5 cm, tip acuminata. Upper petal orbicular, large, ca. 2.2 cm, euncate, base truncate, apex recurved-rostellate, abaxial midvein slightly thickened; lateral united petals broadly clawed, ca. 3 cm, 2-lobed; basal lobes small, ovate, apex acuminate, with a long filamentous hair; distal lobes lunar, large, apex obtuse; auricle inflexed, long. Filaments linear, ca. 5 mm; anthers obtuse. Ovary ovoid. Capsule unknown. Fl. Jul–Aug.

W Sichuan.


 çalışma

Plants annual, to 90 cm tall. Stem erect or ascending in lower part, robust, succulent, branched, glabrous, nodes swollen in lower part, with many fibrous roots. Leaves alternate; petiole 4–8 cm; leaf blade elliptic, 5–10 × 3–4 cm, glabrous, lateral veins 5–7 pairs, curved, base cuneate, margin coarsely crenate, teeth mucronulate, apex caudate-acuminate. Inflorescences 1-flowered; peduncles ca. 1 cm, to 2 cm at fruiting. Pedicels 2–3-bracteate above middle; bracts persistent, ovate-lanceolate, ca. 3 mm, herbaceous. Flowers yellowish. Lateral sepals 2, broadly ovate, ca. 1 × 0.5–0.6 cm, membranous, 9-veined, margin entire, apex mucronulate. Lower sepal yellow stripe, saccate, abruptly narrowed into a hooked spur; spur ca. 8 mm, 2-lobed. Upper petal suborbicular, ca. 1.3 cm in diam., apex rostellate, abaxial midvein narrowly carinate, crista at middle; lower united petals ± clawed, 2.4–2.5 cm; basal lobes ovate, apex acute, with a long filamentous hair; distal lobes orbicular-dolabiform, ca. 2.5 × as long as basal lobes, apex obtuse, with a filamentous long hair; auricle inflexed, rounded. Filaments linear, 4–5 mm; anthers obtuse. Ovary erect, fusiform. Capsule (immature) linear, 1.2–1.3 cm. Fl. Jun–Aug.

Mixed forests, grasslands, along canals; 2300–3600 m. NW Yunnan (Weixi).


Plants annual, 30–60 cm tall, glabrous. Stem erect, simple or branched. Leaves alternate, lower and middle ones long petiolar, upper ones shortly petiolate or subsessile; petiole 3–5 cm; leaf blade pale green abaxially, green adaxially, ovate or ovate-lanceolate, or oblong-obovate, 10–15 × 2.5–3 cm, thinly membranous, lateral veins (6–)10 pairs, base cuneate, attenuate into petiole, or upper ones rounded or cordate, margin coarsely crenate, teeth emarginate, mucronulate, apex acute, acuminate, or caudate-acuminate. Inflorescences in upper leaf axils, 1-flowered; peduncles erect, shorter than leaves, 1.5–2 cm, slender. Pedicels bracteate at middle; bracts persistent, ovate, ca. 3 mm, apex acuminate. Flowers pink, large, 3.5–4 cm deep. Lateral sepals 2, orbicular, 1–1.5 cm in diam., papery, abaxial midvein carinate, 7-veined. Lower sepal violet stripe, broadly funnelform, 3–3.5 cm deep, base gradually narrowed into an incurved spur; spur 1–1.5 cm, slender, 2-lobed; mouth vertical, ca. 2.5 cm wide, tip acuminate. Upper petal orbicular, 1.8–2.2 cm in diam., apex truncate or acuminate or rarely retuse, rostellate, abaxial midvein thickened, broadly crista, crista entire, rounded; lateral united petals ± clawed, 3–3.5 cm, 2-lobed; basal lobes ovate, small, apex fine, with a long filamentous

Plants annual, 15–40 cm tall. Stem striate when dry, branched. Leaves alternate, petiolate; leaf blade ovate, ovate-oblong, or ovate-lanceolate, 4–10 × 1–3(–3.5) cm, thinly membranous, often with 1 or 2 pairs of setose glands, glabrous, lateral veins 6–8 pairs, base slightly acute or subrounded, margin coarsely crenate, apex caudate-acuminate. Inflorescences axillary, 1-flowered; peduncles shorter than leaves. Pedicels bracteate above middle; bracts persistent, ovate, 3–3.5 mm, apex acuminate. Flowers spreading, purple or pink-purple, 3.5–4 cm deep. Lateral sepals 2, broadly ovate, ca. 9 × 11–12 mm, thinly papery, subinequilateral, base rounded or subcordate, margin 5- or 5-denticulate on one side, apex cuspidate. Lower sepal purple stripe, funnelform, 1.7–1.8 cm deep, narrowed into a curved spur; spur 1.4–1.5 cm, 2-lobed. Upper petal orbicular, ca. 1.3 cm in diam., apex rostellate, abaxial midvein narrowly carinate, crista at middle; lateral united petals ± clawed, 2.4–2.5 cm; basal lobes ovate, apex acute, with a long filamentous hair; distal lobes orbicular-dolabiform, ca. 2.5 × as long as basal lobes, apex obtuse, with a filamentous long hair; auricle inflexed, rounded. Filaments linear, 4–5 mm; anthers obtuse. Ovary erect, fusiform. Capsule (immature) linear, 1.2–1.3 cm. Fl. Jun–Aug.

Understories of coniferous forests, shaded wet places; 1700–3000 m. Taiwan.


維西風仙花

Plants annual, 25–50 cm tall. Stem terete, branched in upper part; branches ascending. Leaves alternate; petiole 0.5–2.5 cm; leaf blade lanceolate-elliptic, 4–10 × 1.3–3 cm, membranous, glabrous, lateral veins 4 or 5 pairs, base cuneate-obtuse or attenuate, margin crenate, teeth emarginate or truncate, mucronulate, apex acuminata. Flowers yellowish, solitary, rarely 2; peduncles recurved, 1.5–4.5 cm, slender. Pedicels 2–3-bracteate above middle; bracts linear or ovate, 2–4 mm. Flowers yellow, pink or reddish spotted. Lateral sepals 2, ovate-orbicular, 6.5–7 mm, 7–or 8-veined, apex mucronulate. Lower sepal broadly funnelform, 1.5–2 cm deep, abruptly constricted into a spur; spur incurved, ca. 2.5 cm, 2-lobed; mouth vertical, ca. 6 mm wide, tip cuspidate. Upper petal suborbicular, ca. 1.1 cm, apex rostellate, abaxial midvein thickened, crista; lateral united petals clawed, 1.5–2 cm, 2-lobed; basal lobes ovate, narrow, apex with a long filamentous hair; distal lobes dolabiform, apex obtuse. Filaments flattened, 4–4.5 mm; anthers ovoid, apex obtuse. Ovary fusiform, ca. 4.5 mm. Capsule linear, ca. 2.2 cm. Seeds many, oblong, ca. 3 mm, glabrous. Fl. Jul–Aug.

Understories of coniferous forests, shaded wet places; 1700–3000 m. Taiwan.


滇西北風仙花

Plants annual, 30–60 cm tall, glabrous. Stem erect, simple or branched. Leaves alternate, lower and middle ones long petiolate, upper ones shortly petiolate or subsessile; petiole 3–5 cm; leaf blade pale green abaxially, green adaxially, ovate or ovate-lanceolate, or oblong-obovate, 10–15 × 2.5–3 cm, thinly membranous, lateral veins (6–)10 pairs, base cuneate, attenuate into petiole, or upper ones rounded or cordate, margin coarsely crenate, teeth emarginate, mucronulate, apex acute, acuminate, or caudate-acuminate. Inflorescences in upper leaf axils, 1-flowered; peduncles erect, shorter than leaves, 1.5–2 cm, slender. Pedicels bracteate at middle; bracts persistent, ovate, ca. 3 mm, apex acuminate. Flowers pink, large, 3.5–4 cm deep. Lateral sepals 2, orbicular, 1–1.5 cm in diam., papery, abaxial midvein carinate, 7-veined. Lower sepal violet stripe, broadly funnelform, 3–3.5 cm deep, base gradually narrowed into an incurved spur; spur 1–1.5 cm, slender, 2-lobed; mouth vertical, ca. 2.5 cm wide, tip acuminate. Upper petal orbicular, 1.8–2.2 cm in diam., apex truncate or acuminate or rarely retuse, rostellate, abaxial midvein thickened, broadly crista, crista entire, rounded; lateral united petals ± clawed, 3–3.5 cm, 2-lobed; basal lobes ovate, small, apex fine, with a long filamentous

色果凤仙花 se guo feng xian hua

Plants annual, small, glabrous. Stem erect; branchlets often curved. Leaves alternate; leaf blade gray-green, small, margin aristate-serrate. Inflorescences many flowered. Flowers very small, ca. 5 mm. Lateral sepals linear. Capsule yellow, ca. 2.1 mm.

- Streamsides; ca. 2700 m. Yunnan (Tongchuan).


岔河凤仙花 cha he feng xian hua

Plants annual, conspicuously hairy. Leaves crowded in upper part of stem; leaf blade 3–6 cm, margin aristate-serrate. Pedicels glandular. Flowers pink. Lateral sepals brown, lateral veins conspicuous, milky-white, margin yellow-brown.

- Streamsides on mountains; ca. 3200 m. Yunnan (Qiaojia).

This species is related to Impatiens mairei but differs in that the plant is glabrous with yellow flowers.